

WEST Search History

DATE: Monday, October 28, 2002

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT; PLUR=YES; OP=OR</i>			
L21	L18 and (l1 or l2 or l3)	3	L21
L20	(isalan)[IN]	0	L20
L19	L18 and l10	2	L19
L18	(klug)[IN]	206	L18
L17	L16 and l10	3	L17
L16	(choo)[IN]	159	L16
L15	("choo yen")	2	L15
L14	(choo yen)[IN]	1737	L14
L13	L10 and ("alpha helix")	82	L13
L12	L10 and ("recognition code")	8	L12
L11	L10 and (quadruplet or triplet)	147	L11
L10	L9 and dna	602	L10
L9	L8 and ("nucleic acid" or "nucleic acids")	603	L9
L8	(l5 or l6 or l7) and (bind or binding)	617	L8
L7	L4 and l3	212	L7
L6	L4 and l2	330	L6
L5	L4 and l1	304	L5
L4	"zinc finger"	1107	L4
L3	((((530/350)!.CCLS.))	6865	L3
L2	((((435/6)!.CCLS.))	9733	L2
L1	((((536/23.1)!.CCLS.))	6984	L1

END OF SEARCH HISTORY

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NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
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NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
saved answer sets no longer valid
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
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NEWS 16 Aug 08 CANCERLIT reload
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28 Oct 21 EVENTLINE has been reloaded
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FILE 'HOME' ENTERED AT 12:19:42 ON 28 OCT 2002

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 12:19:50 ON 28 OCT 2002
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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.06	0.27

FULL ESTIMATED COST

FILE 'HOME' ENTERED AT 12:20:13 ON 28 OCT 2002

=> file medline, uspatful, dgene, embase, biosis, wpids, hcaplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.48

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 12:21:00 ON 28 OCT 2002

FILE 'USPATFULL' ENTERED AT 12:21:00 ON 28 OCT 2002
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FILE 'DGENE' ENTERED AT 12:21:00 ON 28 OCT 2002
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FILE 'EMBASE' ENTERED AT 12:21:00 ON 28 OCT 2002
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FILE 'BIOSIS' ENTERED AT 12:21:00 ON 28 OCT 2002
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=> s zinc finger

L1 38906 ZINC FINGER

=> s nucleic acid binding protein

3 FILES SEARCHED...

L2 2277 NUCLEIC ACID BINDING PROTEIN

=> s 12 and method

L3 790 L2 AND METHOD

=> s 13 and production

L4 329 L3 AND PRODUCTION

=> s 14 and 11

L5 84 L4 AND L1

=> d 15 ti abs ibib 1-10

L5 ANSWER 1 OF 84 USPATFULL

TI Isolation and use of fetal urogenital sinus expressed sequences

AB The invention comprises methods for identifying biomarkers useful for prognostic or diagnostic assays of human prostate disease, and for identifying those fetal genes which are differentially expressed between prostate cancers versus normal or benign prostate.

ACCESSION NUMBER: 2002:279688 USPATFULL

TITLE: Isolation and use of fetal urogenital sinus expressed sequences

INVENTOR(S): Sikes, Robert A., Gordonsville, VA, UNITED STATES
Chung, Leland W.K., Lovington, VA, UNITED STATES
Kim, Jin Hee, Santa Monica, CA, UNITED STATES
Fasciana, Claudia, Rotterdam, NETHERLANDS
Trapman, Jan, Mijnsheerenland, NETHERLANDS

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002155119	A1	20021024
APPLICATION INFO.:	US 2001-933797	A1	20010822 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-482933, filed on 14 Jan 2000, ABANDONED Continuation of Ser. No. WO 1999-US10746, filed on 14 May 1999, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-85383P	19980514 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PENNIE & EDMONDS LLP, 1667 K STREET NW, SUITE 1000, WASHINGTON, DC, 20006	
NUMBER OF CLAIMS:	43	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	472 Drawing Page(s)	
LINE COUNT:	13107	

L5 ANSWER 2 OF 84 USPATFULL

TI Compositions and methods for ovarian cancer therapy and diagnosis

AB Compositions and methods for the therapy and diagnosis of cancer, such as ovarian cancer, are disclosed. Compositions may comprise one or more ovarian carcinoma proteins, immunogenic portions thereof, polynucleotides that encode such portions or antibodies or immune system cells specific for such proteins. Such compositions may be used, for example, for the prevention and treatment of diseases such as ovarian cancer. Methods are further provided for identifying tumor antigens that are secreted from ovarian carcinomas and/or other tumors. Polypeptides and polynucleotides as provided herein may further be used for the diagnosis and monitoring of ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:275909 USPATFULL

TITLE: Compositions and methods for ovarian cancer therapy and

diagnosis
INVENTOR(S): Benson, Darin R., Seattle, WA, United States
Lodes, Michael J., Seattle, WA, United States
Mitcham, Jennifer L., Redmond, WA, United States
King, Gordon E., Seattle, WA, United States
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6468758	B1	20021022
APPLICATION INFO.:	US 1999-397787		19990916 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-246429, filed on 8 Feb 1999 Continuation-in-part of Ser. No. US 1998-159320, filed on 23 Sep 1998, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Brusca, John S.		
ASSISTANT EXAMINER:	Moran, Margorie A.		
LEGAL REPRESENTATIVE:	Seed Intellectual Property Law Group PLLC		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	32 Drawing Figure(s); 32 Drawing Page(s)		
LINE COUNT:	5338		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L5 ANSWER 3 OF 84 USPATFULL
TI Nucleic acids, proteins and antibodies
AB This invention relates to newly identified prostate or prostate cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "prostate cancer antigens," and to the complete gene sequences associated therewith and to the expression products thereof, and to antibodies that immunospecifically bind these polypeptides, as well as the use of such prostate cancer polynucleotides, antigens, and antibodies for detection, prevention, prognosis, and treatment of disorders of the reproductive system, particularly disorders of the prostate, including, but not limited to, the presence of prostate cancer and prostate cancer metastases. More specifically, isolated prostate cancer nucleic acid molecules are provided encoding novel prostate cancer polypeptides. Novel prostate cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human prostate cancer polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the prostate, including prostate cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the **production** and/or function of the polypeptides of the invention.

ACCESSION NUMBER: 2002:273550 USPATFULL
TITLE: Nucleic acids, proteins and antibodies
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151681	A1	20021017
APPLICATION INFO.:	US 2001-925300	A1	20010810 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US5988, filed on 8 Mar 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-124270P	19990312 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
LINE COUNT:	29771	

L5 ANSWER 4 OF 84 USPATFULL

TI PEI: DNA vector formulations for in vitro and in vivo gene delivery

AB The present invention relates generally to the fields of nucleic acid transfection. More particularly, it concerns novel polycation:nucleic acid compositions, methods of preparation of such compositions and methods of transfecting cells with such compositions.

ACCESSION NUMBER: 2002:272939 USPATFULL

TITLE: PEI: DNA vector formulations for in vitro and in vivo gene delivery

INVENTOR(S): Cristiano, Richard J., Pearland, TX, UNITED STATES
Yamashita, Motoyuki, Kochi City, JAPAN

PATENT ASSIGNEE(S): Board of Regents, The University of Texas System (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002151060	A1	20021017
APPLICATION INFO.:	US 2001-962922	A1	20010925 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-235237P	20000925 (60)
	US 2000-235635P	20000926 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FULBRIGHT & JAWORSKI L.L.P., A REGISTERED LIMITED LIABILITY PARTNERSHIP, SUITE 2400, 600 CONGRESS AVENUE, AUSTIN, TX, 78701	
NUMBER OF CLAIMS:	141	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	31 Drawing Page(s)	
LINE COUNT:	7002	

L5 ANSWER 5 OF 84 USPATFULL

TI End selection in directed evolution

AB This invention provides methods of obtaining novel polynucleotides and encoded polypeptides by the use of non-stochastic methods of directed evolution (DirectEvolution.TM.). A particular advantage of end-selection-based methods is the ability to recover full-length polynucleotides from a library of progeny molecules generated by mutagenesis methods. These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). This invention provides methods of obtaining novel enzymes that have optimized physical &/or biological properties. Through use of the claimed methods, genetic vaccines, enzymes, small molecules, and other desirable molecules can be evolved towards desirable properties. For

example, vaccine vectors, can be obtained that exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like. Furthermore, this invention provides methods of obtaining a variety of novel biologically active molecules, in the fields of antibiotics, pharmacotherapeutics, and transgenic traits.

ACCESSION NUMBER: 2002:265886 USPATFULL
TITLE: End selection in directed evolution
INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, UNITED STATES
Frey, Gerhard Johann, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002146762	A1	20021010
APPLICATION INFO.:	US 2001-885551	A1	20010619 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-522289, filed on 9 Mar 2000, PATENTED Continuation-in-part of Ser. No. US 2000-498557, filed on 4 Feb 2000, PENDING Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000, PENDING Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, PATENTED Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, PATENTED Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, PATENTED Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, PATENTED Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, PATENTED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-8311P	19951207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	GARY CARY WARE & FRIENDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1600, SAN DIEGO, CA, 92121-2189	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	
LINE COUNT:	8987	

L5 ANSWER 6 OF 84 USPATFULL

TI Exonuclease-mediated gene assembly in directed evolution

AB A directed evolution process comprising novel methods for generating improved progeny molecules having desirable properties, including, for example, a **method** for rapid and facilitated **production** from a parental polynucleotide template, of a set of mutagenized progeny polynucleotides wherein at least one codon encoding each of the 20 naturally encoded amino acids is represented at each original codon position. This **method**, termed site-saturation mutagenesis, or simply saturation mutagenesis, is preferably based on the use of the degenerate N,N,G/T sequence. Also, a **method** of producing from a parental polypeptide template, a set of mutagenized progeny polypeptides wherein each of the 20 naturally encoded amino acids is represented at each original amino acid position. Also, other mutagenization processes that can be used in combination with, or in lieu of, saturation mutagenesis, including, for example: (a) assembly and/or reassembly of polynucleotide building blocks (including sections

of genes &/or of gene families) mediated by a source of exonuclease activity such as exonuclease III; and (b) introduction of two or more related polynucleotides into a suitable host cell such that a hybrid polynucleotide is generated by recombination and reductive reassortment. Also molecular property screening methods, including a preferred **method**, termed end selection, comprised of using an enzyme, such as a topoisomerase, a restriction endonuclease, &/or a nicking enzyme (such as N. BstNB I), to detect a specific terminal sequence in a working polynucleotide, to produce a ligatable end thereat, and to ligate and clone the working polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:258824 USPATFULL
 TITLE: Exonuclease-mediated gene assembly in directed evolution
 INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, UNITED STATES
 PATENT ASSIGNEE(S): Diversa Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002142394	A1	20021003
APPLICATION INFO.:	US 2002-87426	A1	20020301 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-276860, filed on 26 Mar 1999, GRANTED, Pat. No. US 6352842		
	Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, GRANTED, Pat. No. US 6238884		
	Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820		
	Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179		
	Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696		
	Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-8311P	19951207 (60)
	US 1995-8316P	19951207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HALE AND DORR LLP, 300 PARK AVENUE, NEW YORK, NY, 10022	
NUMBER OF CLAIMS:	1	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	4637	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 84 USPATFULL

TI Detection of nucleic acids by multiple sequential invasive cleavages 02
 AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. The structure-specific nuclease activity of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof. The present invention further relates to methods and devices for the separation of nucleic acid molecules based on charge. The present invention also provides methods for the detection of non-target cleavage products via the formation of a complete and activated protein

binding region. The invention further provides sensitive and specific methods for the detection of human cytomegalovirus nucleic acid in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:254176 USPATFULL
TITLE: Detection of nucleic acids by multiple sequential
invasive cleavages 02
INVENTOR(S): Hall, Jeff G., Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Mast, Andrea L., Madison, WI, United States
Brow, Mary Ann D., Madison, WI, United States
PATENT ASSIGNEE(S): Third Wave Technologies, Inc, Madison, WI, United
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6458535	B1	20021001
APPLICATION INFO.:	US 1999-350597		19990709 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-823516, filed on 24 Mar 1997, now patented, Pat. No. US 5994069 Continuation-in-part of Ser. No. US 1996-759038, filed on 2 Dec 1996, now patented, Pat. No. US 6090543 Continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996, now patented, Pat. No. US 5085557 Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996, now patented, Pat. No. US 6001567 Continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996, now patented, Pat. No. US 5846717, issued on 8 Dec 1998		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Jones, W. Gary		
ASSISTANT EXAMINER:	Souaya, Jehanne		
LEGAL REPRESENTATIVE:	Medlen & Carroll, LLP		
NUMBER OF CLAIMS:	27		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	170 Drawing Figure(s); 128 Drawing Page(s)		
LINE COUNT:	13831		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 84 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
AB Compositions and methods for the therapy and diagnosis of cancer,
particularly ovarian cancer, are disclosed. Illustrative compositions
comprise one or more ovarian tumor polypeptides, immunogenic portions
thereof, polynucleotides that encode such polypeptides, antigen
presenting cell that expresses such polypeptides, and T cells that are
specific for cells expressing such polypeptides. The disclosed
compositions are useful, for example, in the diagnosis, prevention
and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:243051 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis
of ovarian cancer
INVENTOR(S): Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002132237	A1	20020919
APPLICATION INFO.:	US 2001-867701	A1	20010529 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-207484P	20000526 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1	
LINE COUNT:	25718	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 84 USPATFULL

TI Methods using genetic package display for selecting internalizing ligands for gene delivery

AB A genetic package display system is presented for selecting internalizing ligands for gene delivery. The genetic package carries a reporter, selectable marker, or a specifically detectable nucleic acid sequence and presents a ligand on its surface. More specifically, a library of potential ligands may be screened for the ability to successfully transduce target cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:238816 USPATFULL

TITLE: Methods using genetic package display for selecting internalizing ligands for gene delivery

INVENTOR(S): Larocca, David, Encinitas, CA, United States
Baird, Andrew, San Diego, CA, United States
Kassner, Paul, Hayward, CA, United States

PATENT ASSIGNEE(S): Selective Genetics, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6451527	B1	20020917
APPLICATION INFO.:	US 1999-258689		19990226 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1998-193445, filed on 17 Nov 1998 Continuation-in-part of Ser. No. US 1998-195379, filed on 17 Nov 1998 Continuation-in-part of Ser. No. US 1998-141631, filed on 28 Aug 1998, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-57067P	19970829 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Ponnaluri, Padmashri	
LEGAL REPRESENTATIVE:	Seed Intellectual Property Law Group PLLC	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	17 Drawing Figure(s); 13 Drawing Page(s)	
LINE COUNT:	2048	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 84 USPATFULL

TI Nod2 nucleic acids and proteins

AB The present invention relates to intracellular signalling molecules, in particular the Nod2 protein and nucleic acids encoding the Nod2 protein. The present invention provides isolated nucleotide sequence encoding Nod2, isolated Nod2 peptides, antibodies that specifically bind Nod2, methods for the detection of Nod2, and methods for screening compounds for the ability to alter Nod2 associated signal transduction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:235484 USPATFULL
TITLE: Nod2 nucleic acids and proteins
INVENTOR(S): Nunez, Gabriel, Ann Arbor, MI, UNITED STATES
 Inohara, Naohiro, Ann Arbor, MI, UNITED STATES
 Ogura, Yasunori, Ann Arbor, MI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002127673	A1	20020912
APPLICATION INFO.:	US 2001-14269	A1	20011026 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-244289P	20001030 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	David A. Casimir, MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA, 94105	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	21 Drawing Page(s)	
LINE COUNT:	5519	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

L5 ANSWER 11 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination

AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:224459 USPATFULL

TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination

INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
Cramer, Andreas, Mountain View, CA, United States

PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6444468	B1	20020903
APPLICATION INFO.:	US 2000-724958		20001128 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-133508, filed on 12 Aug 1998, now patented, Pat. No. US 6287861 Continuation of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan C.		
LEGAL REPRESENTATIVE:	Kruse, Norman, Liebeschuetz, Joe		
NUMBER OF CLAIMS:	62		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	4266		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 84 USPATFULL

TI End selection in directed evolution

AB A directed evolution process comprising novel methods for generating improved progeny molecules having desirable properties, including, for example, a **method** for rapid and facilitated **production** from a parental polynucleotide template, of a set of mutagenized progeny polynucleotides wherein at least one codon encoding each of the 20 naturally encoded amino acids is represented at each original codon position. This **method**, termed site-saturation mutagenesis, or simply saturation mutagenesis, is preferably based on the use of the degenerate N,N,G/T sequence. Also, a **method** of producing from a parental polypeptide template, a set of mutagenized progeny polypeptides wherein each of the 20 naturally encoded amino acids is represented at each original amino acid position. Also, other mutagenization processes that can be used in combination with, or in lieu of, saturation mutagenesis, including, for example: (a) assembly and/or reassembly of polynucleotide building blocks, which building blocks can be sections of genes &/or of gene families; and (b) introduction of two or more related polynucleotides into a suitable host cell such that a hybrid polynucleotide is generated by recombination and

reductive reassortment. Also, vector and expression vehicles including such polynucleotides and correspondingly expressed polypeptides. Also molecular property screening methods, including a preferred **method**, termed end selection, comprised of using an enzyme, such as a topoisomerase, a restriction endonuclease, &/or a nicking enzyme (such as N. BstNB I), to detect a specific terminal sequence in a working polynucleotide, to produce a ligatable end thereat, and to ligate and clone the working polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:221318 USPATFULL
TITLE: End selection in directed evolution
INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, UNITED STATES
Frey, Gerhard Johann, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002119457	A1	20020829
APPLICATION INFO.:	US 2001-867262	A1	20010529 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-267118, filed on 9 Mar 1999, PATENTED Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, PATENTED Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, PATENTED Continuation-in-part of Ser. No. US 1996-760489, filed on 5 Dec 1996, PATENTED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-8311P	19951207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	GARY CARY WARE & FRIENDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1600, SAN DIEGO, CA, 92121-2189	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	4507	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 84 USPATFULL

TI **Method** of DNA shuffling with polynucleotides produced by blocking or interrupting a synthesis or amplification process

AB Disclosed is a process of performing Sexual PCR which includes generating random polynucleotides by interrupting or blocking synthesis or amplification process to slow or halt synthesis or amplification of at least one polynucleotides, optionally amplifying the polynucleotides, and reannealing the polynucleotides to produce random mutant polynucleotides. Also provided are vector and expression vehicles including such mutant polynucleotides, polypeptides expressed by the mutant polynucleotides and a **method** for producing random polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:217027 USPATFULL
TITLE: **Method** of DNA shuffling with polynucleotides produced by blocking or interrupting a synthesis or amplification process
INVENTOR(S): Short, Jay M., Encinitas, CA, United States
PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 6440668 B1 20020827
APPLICATION INFO.: US 1999-376727 19990817 (9)
RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-677112, filed on 9 Jul
1996, now patented, Pat. No. US 5965408
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Zitomer, Stephanie
LEGAL REPRESENTATIVE: Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 2614
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 14 OF 84 USPATFULL

TI Systematic evolution of ligands by exponential enrichment:
photoselection of nucleic acid ligands and solution selex

AB A **method** for identifying nucleic acid ligands to target
molecules using the SELEX procedure. Nucleic acid candidate sequences
contain photoreactive groups. After exposure of the nucleic acid
sequences to the target molecule, nucleic acid-target molecule complexes
are formed between nucleic acids having increased affinity to the target
molecule and the target molecule. The complexes are irradiated such that
photocrosslinks form between the photoreactive groups of the bound
nucleic acids and the target molecule. The photocrosslinked complexes
are separated from unbound nucleic acids, and the nucleic acids
amplified to yield a ligand-enriched mixture of nucleic acids.

Described herein are methods for improved partitioning between high and
low affinity nucleic acid ligands identified through the SELEX
method, termed solution SELEX. The solution SELEX **method**
achieves partitioning between high and low affinity nucleic acid-target
complexes through a number of methods, including (1) primer extension
inhibition which results in differentiable cDNA products. Primer
extension inhibition is achieved with the use of nucleic acid
polymerases, including DNA or RNA polymerases, reverse transcriptase,
and Q β -replicase; (2) exonuclease hydrolysis inhibition which
results in only the highest affinity ligands amplifying during PCR. This
is achieved with the use of any 3'→5' double-stranded
exonuclease; (3) linear to circle formation to generate molecules
amplifiable during PCR; or (4) PCR amplification of single-stranded
nucleic acids. A central theme of the **method** of the present
invention is that the nucleic acid candidate mixture is screened in
solution and results in preferential amplification of the highest
affinity RNA ligand or catalytic RNA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:198552 USPATFULL

TITLE: Systematic evolution of ligands by exponential
enrichment: photoselection of nucleic acid ligands and
solution selex

INVENTOR(S): Gold, Larry, Boulder, CO, UNITED STATES
Willis, Michael, San Diego, CA, UNITED STATES
Koch, Tad, Boulder, CO, UNITED STATES
Ringquist, Steven, Oceanside, CA, UNITED STATES
Jensen, Kirk, New York, NY, UNITED STATES
Atkinson, Brent, Winterthur, SWITZERLAND

PATENT ASSIGNEE(S): SomaLogic, Inc. (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2002106652 A1 20020808
 APPLICATION INFO.: US 2001-882246 A1 20010614 (9)
 RELATED APPLN. INFO.: Division of Ser. No. US 1999-459553, filed on 13 Dec 1999, PATENTED Division of Ser. No. US 1998-93293, filed on 8 Jun 1998, PATENTED Continuation of Ser. No. US 1996-612895, filed on 8 Mar 1996, PATENTED A 371 of International Ser. No. WO 1994-US10562, filed on 16 Sep 1994, UNKNOWN Continuation-in-part of Ser. No. US 1993-143564, filed on 25 Oct 1993, ABANDONED Continuation-in-part of Ser. No. US 1993-123935, filed on 17 Sep 1993, ABANDONED Continuation-in-part of Ser. No. US 1991-714131, filed on 10 Jun 1991, PATENTED Continuation-in-part of Ser. No. US 1990-536428, filed on 11 Jun 1990, ABANDONED Continuation-in-part of Ser. No. US 1992-931473, filed on 17 Aug 1992, PATENTED Division of Ser. No. US 1991-714131, filed on 10 Jun 1991, PATENTED

DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: Swanson & Bratschun, L.L.C., Suite 330, 1745 Shea Center Drive, Highlands Ranch, CO, 80129

NUMBER OF CLAIMS: 4
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 35 Drawing Page(s)
 LINE COUNT: 2574
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 15 OF 84 USPATFULL
 TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
 AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 ACCESSION NUMBER: 2002:174999 USPATFULL
 TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
 INVENTOR(S): Stemmer, Willem P.C., Los Gatos, CA, United States
 PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6420175	B1	20020716
APPLICATION INFO.:	US 1999-231253		19990115 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-100856, filed on 18 Jun 1998, now patented, Pat. No. US 6132970 Continuation of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan C.		
LEGAL REPRESENTATIVE:	Kruse, Norman, Liebeschuetz, Joe		

NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 15 Drawing Page(s)
LINE COUNT: 3737
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 16 OF 84 USPATFULL

TI Gene markers useful for detecting skin damage in response to ultraviolet radiation

AB The cellular response to ultraviolet radiation exposure has been characterized on the molecular level through the use of high density gene array technology. Nucleic acid molecules and protein molecules, the expression of which are repressed or induced in response to ultraviolet radiation exposure, are identified according to a temporal pattern of altered expression post ultraviolet radiation exposure. Methods are disclosed that utilized these ultraviolet radiation-regulated molecules as markers for ultraviolet radiation exposure. Other screening methods of the invention are designed for the identification of compounds that modulate the response of a cell to ultraviolet radiation exposure. The invention also provides compositions useful for drug screening or pharmaceutical purposes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:171875 USPATFULL
TITLE: Gene markers useful for detecting skin damage in response to ultraviolet radiation
INVENTOR(S): Blumenberg, Miroslav, New York, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002090624	A1	20020711
APPLICATION INFO.:	US 2001-947870	A1	20010906 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-231454P	20000908 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HALE AND DORR, LLP, 60 STATE STREET, BOSTON, MA, 02109	
NUMBER OF CLAIMS:	97	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	10110	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 17 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination

AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:160573 USPATFULL
TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination

INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
Cramieri, Andreas M., Mountain View, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6413774	B1	20020702
APPLICATION INFO.:	US 1999-240734		19990129 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-621859, filed on 25 Mar 1996, now patented, Pat. No. US 6117679 Continuation-in-part of Ser. No. US 1995-564955, filed on 30 Nov 1995 Continuation-in-part of Ser. No. WO 1995-US2126, filed on 17 Feb 1995, now patented, Pat. No. WO 5811238 Continuation of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Kruse, Norman J., Quine, Jonathan Alan, Law office of Jonathan Alan Quine		
NUMBER OF CLAIMS:	36		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	35 Drawing Figure(s); 37 Drawing Page(s)		
LINE COUNT:	6312		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L5 ANSWER 18 OF 84 USPATFULL

TI Compositions and methods for ovarian cancer therapy and diagnosis
AB Compositions and methods for the therapy and diagnosis of cancer, such
as ovarian cancer, are disclosed. Compositions may comprise one or more
ovarian carcinoma proteins, immunogenic portions thereof,
polynucleotides that encode such portions or antibodies or immune system
cells specific for such proteins. Such compositions may be used, for
example, for the prevention and treatment of diseases such as ovarian
cancer. Methods are further provided for identifying tumor antigens that
are secreted from ovarian carcinomas and/or other tumors. Polypeptides
and polynucleotides as provided herein may further be used for the
diagnosis and monitoring of ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:148574 USPATFULL
TITLE: Compositions and methods for ovarian cancer therapy and
diagnosis
INVENTOR(S): Benson, Darin R., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Mitcham, Jennifer L., Redmond, WA, UNITED STATES
King, Gordon E., Shoreline, WA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002076715	A1	20020620
APPLICATION INFO.:	US 2001-876889	A1	20010606 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-397787, filed on 16 Sep 1999, PENDING Continuation-in-part of Ser. No. US 1999-246429, filed on 8 Feb 1999, ABANDONED Continuation-in-part of Ser. No. US 1998-159320, filed on 23 Sep 1998, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092		

NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Page(s)
LINE COUNT: 7207
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 19 OF 84 USPATFULL

TI 98P7C3: homeodomain protein highly expressed in various cancers
AB A novel gene (designated 98P7C3) and its encoded protein are described. While 98P7C3 exhibits tissue-restricted expression in normal adult tissue, it is aberrantly expressed in multiple cancers including prostate, bladder, kidney, lung, breast, uterine, cervical, stomach, rectal and colon cancers. Consequently, 98P7C3 provides a diagnostic and/or therapeutic target for cancers, and the 98P7C3 gene or fragment thereof, or its encoded protein or a fragment thereof used to elicit an immune response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:133493 USPATFULL
TITLE: 98P7C3: homeodomain protein highly expressed in various cancers
INVENTOR(S): Challita-Eid, Pia M., Encino, CA, UNITED STATES
Hubert, Rene S., Los Angeles, CA, UNITED STATES
Faris, Mary, Los Angeles, CA, UNITED STATES
Afar, Daniel E.H., Brisbane, CA, UNITED STATES
Levin, Elana, Los Angeles, CA, UNITED STATES
Mitchell, Steve Chappell, Santa Monica, CA, UNITED STATES
Jakobovits, Aya, Beverly Hills, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002068345	A1	20020606
APPLICATION INFO.:	US 2001-866359	A1	20010524 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-207138P	20000524 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	GATES & COOPER LLP, HOWARD HUGHES CENTER, 6701 CENTER DRIVE WEST, SUITE 1050, LOS ANGELES, CA, 90045	
NUMBER OF CLAIMS:	55	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	20 Drawing Page(s)	
LINE COUNT:	6137	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 20 OF 84 USPATFULL

TI Methods using genetic package display for detecting and identifying protein-protein interactions that facilitate internalization and transgene expression and cells or tissues competent for the same and methods for evolving gene delivery vectors
AB A genetic package display system and methodology for probing protein-protein interactions that lead to cell transduction, selecting and/or identifying internalizing ligands, target cells and tissues which internalize known or putative ligands, and cell transduction facilitating peptides is provided. A ligand displaying genetic package that carries a selectable marker (e.g., reporter, selection, etc.) and presents a ligand on its surface is utilized to identify internalizing ligands, transduction facilitating peptides, and/or a variety of cells and tissue types for the ability to be successfully transduced by the

ligand displaying genetic package. Also provided are methods for evolving a ligand displaying package to facilitate gene delivery or delivery of any desired agent (e.g., pharmaceutical, polypeptide, peptide, etc.) into a cell and/or targeting cellular compartments such as the nucleus, endosome, chloroplast, mitochondria, etc.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:133421 USPATFULL

TITLE: Methods using genetic package display for detecting and identifying protein-protein interactions that facilitate internalization and transgene expression and cells or tissues competent for the same and methods for evolving gene delivery vectors

INVENTOR(S): Larocca, David, Encinitas, CA, UNITED STATES

Kassner, Paul, San Mateo, CA, UNITED STATES

Baird, Andrew, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002068272	A1	20020606
APPLICATION INFO.:	US 2001-866073	A1	20010524 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2000-US9925361, filed on 25 May 2000, UNKNOWN		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092		
NUMBER OF CLAIMS:	41		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	18 Drawing Page(s)		
LINE COUNT:	2965		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 21 OF 84 USPATFULL

TI Screening system for **zinc finger** polypeptides for a desired binding ability

AB This invention relates to a **method** for producing a **zinc finger nucleic acid binding protein** comprising preparing a **zinc finger** protein according design rules, varying the protein at one or more positions, and selecting variants which bind to a target nucleic acid sequence by polysome display.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:126312 USPATFULL

TITLE: Screening system for **zinc finger** polypeptides for a desired binding ability

INVENTOR(S): Choo, Yen, Cambridge, UNITED KINGDOM
Moore, Michael, Amersham Bucks, UNITED KINGDOM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002064824	A1	20020530
APPLICATION INFO.:	US 2001-851271	A1	20010508 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 1999-GB3730, filed on 9 Nov 1999, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1998-24544	19981109
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

LEGAL REPRESENTATIVE: FROMMER LAWRENCE & HAUG LLP, 745 Fifth Avenue, New York, NY, 10151
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
LINE COUNT: 1356
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 22 OF 84 USPATFULL
TI 52 human secreted proteins
AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:126306 USPATFULL
TITLE: 52 human secreted proteins
INVENTOR(S): Ni, Jian, Germantown, MD, UNITED STATES
Baker, Kevin P., Darnestown, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES
Fiscella, Michele, Bethesda, MD, UNITED STATES
Komatsoulis, George A., Silver Spring, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Duan, D. Roxanne, Bethesda, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Wei, Ping, Brookeville, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002064818	A1	20020530
APPLICATION INFO.:	US 2001-789561	A1	20010222 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2000-US24008, filed on 31 Aug 2000, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-152317P	19990903 (60)
	US 1999-152315P	19990903 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
LINE COUNT:	24623	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 23 OF 84 USPATFULL
TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
AB A **method** for DNA reassembly after random fragmentation, and

its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:122489 USPATFULL

TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination

INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States

PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6395547	B1	20020528
APPLICATION INFO.:	US 2000-619550		20000719 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-239395, filed on 28 Jan 1999 Continuation of Ser. No. US 1996-621859, filed on 25 Mar 1996, now patented, Pat. No. US 6117679 Continuation-in-part of Ser. No. US 1995-564955, filed on 30 Nov 1995, now patented, Pat. No. US 5811238 Continuation-in-part of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan C.		
LEGAL REPRESENTATIVE:	Kruse, Norman J., Quine, Jonathan Alan, Quine Intellectual Property Law Group, P.C.		
NUMBER OF CLAIMS:	42		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	72 Drawing Figure(s); 37 Drawing Page(s)		
LINE COUNT:	6098		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 24 OF 84 USPATFULL

TI Nucleic acids, proteins and antibodies

AB The present invention relates to novel colorectal cancer related polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "colorectal cancer antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such colorectal cancer polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the colon and/or rectum, including, but not limited to, the presence of colorectal cancer and colorectal cancer metastases. More specifically, isolated colorectal cancer nucleic acid molecules are provided encoding novel colorectal cancer polypeptides. Novel colorectal cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human colorectal cancer polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the colon and/or rectum, including colorectal cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention.

The invention further relates to methods and/or compositions for inhibiting or promoting the **production** and/or function of the polypeptides of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:106416 USPATFULL
TITLE: Nucleic acids, proteins and antibodies
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002055627	A1	20020509
APPLICATION INFO.:	US 2001-925299	A1	20010810 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 2000-US5883, filed on 8 Mar 2000, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-124270P	19990312 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
LINE COUNT:	20658	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 25 OF 84 USPATFULL

TI GTP-binding protein useful in treatment and detection of cancer
AB A novel gene (designated 103P3E8) and its encoded protein are described. While 103P3E8 exhibits tissue specific expression in normal adult tissue, it is aberrantly expressed in multiple cancers including prostate, bladder, kidney, colon, lung, breast, rectal and stomach cancers. Consequently, 103P3E8 provides a diagnostic and/or therapeutic target for cancers, and the 103P3E8 gene or fragment thereof, or its encoded protein or a fragment thereof can be used to elicit an immune response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:106269 USPATFULL
TITLE: GTP-binding protein useful in treatment and detection of cancer
INVENTOR(S): Faris, Mary, Los Angeles, CA, UNITED STATES
Challita-Eid, Pia M., Encino, CA, UNITED STATES
Raitano, Arthur B., Los Angeles, CA, UNITED STATES
Mitchell, Steve Chappell, Santa Monica, CA, UNITED STATES
Afar, Daniel E.H., Brisbane, CA, UNITED STATES
Jakobovits, Aya, Beverly Hills, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002055478	A1	20020509
APPLICATION INFO.:	US 2001-834765	A1	20010412 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-196647P	20000412 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

LEGAL REPRESENTATIVE: GATES & COOPER LLP, HOWARD HUGHES CENTER, 6701 CENTER
DRIVE WEST, SUITE 1050, LOS ANGELES, CA, 90045
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 5003
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 26 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by
iterative selection and recombination
AB A **method** for DNA reassembly after random fragmentation, and
its application to mutagenesis of nucleic acid sequences by in vitro or
in vivo recombination is described. In particular, a **method**
for the **production** of nucleic acid fragments or
polynucleotides encoding mutant proteins is described. The present
invention also relates to a **method** of repeated cycles of
mutagenesis, shuffling and selection which allow for the directed
molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:81277 USPATFULL
TITLE: Methods for generating polynucleotides having desired
characteristics by iterative selection and
recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6372497	B1	20020416
APPLICATION INFO.:	US 2000-590774		20000608 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-621859, filed on 25 Mar 1996, now patented, Pat. No. US 6117679 Continuation-in-part of Ser. No. US 1995-564955, filed on 30 Nov 1995, now patented, Pat. No. US 5811238 Continuation-in-part of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Kruse, Norman J., Quine, Jonathan Alan, The Law Offices of Jonathan Alan Quine		
NUMBER OF CLAIMS:	37		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	72 Drawing Figure(s); 37 Drawing Page(s)		
LINE COUNT:	6311		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 27 OF 84 USPATFULL

TI Methods of evolving a polynucleotides by mutagenesis and recombination
AB A **method** of mutating a polynucleotide such that it has a
desired or improved functional property is disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:69827 USPATFULL
TITLE: Methods of evolving a polynucleotides by mutagenesis
and recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States

PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6365408	B1	20020402
APPLICATION INFO.:	US 2000-477763		20000104 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-100856, filed on 19 Jun 1998, now patented, Pat. No. US 6132970 Continuation of Ser. No. US 537874, now patented, Pat. No. US 5830721		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Kruse, Norman, Liebeschuetz, Joe		
NUMBER OF CLAIMS:	40		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	4167		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 28 OF 84 USPATFULL

TI Exonuclease-mediated nucleic acid reassembly in directed evolution
AB This invention provides methods of obtaining novel polynucleotides and encoded polypeptides by the use of non-stochastic methods of directed evolution (DirectEvolution.TM.). A particular advantage of exonuclease-mediated reassembly methods is the ability to reassemble nucleic acid strands that would otherwise be problematic to chimerize. Exonuclease-mediated reassembly methods can be used in combination with other mutagenesis methods provided herein. These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). This invention provides methods of obtaining novel enzymes that have optimized physical &/or biological properties. Through use of the claimed methods, genetic vaccines, enzymes, small molecules, and other desirable molecules can be evolved towards desirable properties. For example, vaccine vectors can be obtained that exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like. Furthermore, this invention provides methods of obtaining a variety of novel biologically active molecules, in the fields of antibiotics, pharmacotherapeutics, and transgenic traits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:63712 USPATFULL
TITLE: Exonuclease-mediated nucleic acid reassembly in directed evolution
INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, United States
Djavakhishvili, Tsotne David, San Diego, CA, United States
Frey, Gerhard Johann, San Diego, CA, United States
PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6361974	B1	20020326
APPLICATION INFO.:	US 2000-535754		20000327 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-522289, filed on 9 Mar 2000 Continuation-in-part of Ser. No. US		

2000-498557, filed on 4 Feb 2000 Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000 Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1997-962504, filed on 31 Oct 1997, now patented, Pat. No. US 6029056 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965408 Continuation-in-part of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat. No. US 5939250

	NUMBER	DATE
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PRIORITY INFORMATION:	US 1995-8311P	19951207 (60)
	US 1995-8316P	19951207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Park, Hankyel T.	
LEGAL REPRESENTATIVE:	Gray Cary Ware & Freidenrich, Haile, Lisa A., Shen, Greg	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)	
LINE COUNT:	7313	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L5 ANSWER 29 OF 84 USPATFULL
 TI End selection in directed evolution
 AB This invention provides methods of obtaining novel polynucleotides and encoded polypeptides by the use of non-stochastic methods of directed evolution (DirectEvolution.TM.). A particular advantage of end-selection-based methods is the ability to recover full-length polynucleotides from a library of progeny molecules generated by mutagenesis methods. These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). This invention provides methods of obtaining novel enzymes that have optimized physical &/or biological properties. Through use of the claimed methods, genetic vaccines, enzymes, small molecules, and other desirable molecules can be evolved towards desirable properties. For example, vaccine vectors can be obtained that exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like. Furthermore, this invention provides methods of obtaining a variety of novel biologically active molecules, in the fields of antibiotics, pharmacotherapeutics, and transgenic traits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:57570 USPATFULL
 TITLE: End selection in directed evolution
 INVENTOR(S): Short, Jay M., Encinitas, CA, United States
 Frey, Gerhard Johann, San Diego, CA, United States
 PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6358709	B1	20020319
APPLICATION INFO.:	US 2000-522289		20000309 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-498557, filed on 4 Feb 2000 Continuation-in-part of Ser. No. US 2000-495052, filed on 13 Jan 2000 Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999, now abandoned Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, now patented, Pat. No. US 6238884 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, now patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1997-962504, filed on 31 Oct 1997 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965408 Continuation-in-part of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat. No. US 5939250		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-8311P	19951207 (60)
	US 1995-8316P	19951207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Park, Hankyel T.	
LEGAL REPRESENTATIVE:	Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.	
NUMBER OF CLAIMS:	36	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 7 Drawing Page(s)	
LINE COUNT:	7029	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L5 ANSWER 30 OF 84 USPATFULL

TI Human single nucleotide polymorphisms

AB The invention provides nucleic acid segments of the human genome, particularly nucleic acid segments from genes including polymorphic sites. Allele-specific primers and probes hybridizing to regions flanking or containing these sites are also provided. The nucleic acids, primers and probes are used in applications such as phenotype correlations, forensics, paternity testing, medicine and genetic analysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:55155 USPATFULL

TITLE: Human single nucleotide polymorphisms

INVENTOR(S): Cargill, Michele, Gaithersburg, MD, UNITED STATES
Ireland, James S., Gaithersburg, MD, UNITED STATES
Lander, Eric S., Cambridge, MA, UNITED STATES

PATENT ASSIGNEE(S): Whitehead Institute for Biomedical Research, Cambridge, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002032319	A1	20020314
APPLICATION INFO.:	US 2001-801274	A1	20010307 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-187510P	20000307 (60)
	US 2000-206129P	20000522 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HAMILTON BROOK SMITH AND REYNOLDS, P.C., TWO MILITIA DR, LEXINGTON, MA, 02421-4799	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
LINE COUNT:	8981	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 31 OF 84 USPATFULL

TI **METHOD** OF DNA SHUFFLING WITH POLYNUCLEOTIDES PRODUCED BY
BLOCKING OR INTERRUPTING A SYNTHESIS OR AMPLIFICATION PROCESS

AB Disclosed is a process of performing "Sexual" PCR which includes
generating random polynucleotides by interrupting or blocking a
synthesis or amplification process to show or halt synthesis or
amplification of at least one polynucleotide, optionally amplifying the
polynucleotides, and reannealing the polynucleotides to produce random
mutant polynucleotides. Also provided are vector and expression vehicles
including such mutant polynucleotides, polypeptides expressed by the
mutant polynucleotides and a **method** for producing random
mutant polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:48252 USPATFULL

TITLE: **METHOD** OF DNA SHUFFLING WITH POLYNUCLEOTIDES
PRODUCED BY BLOCKING OR INTERRUPTING A SYNTHESIS OR
AMPLIFICATION PROCESS

INVENTOR(S): SHORT, JAY M., ENCINITAS, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002028443	A1	20020307
APPLICATION INFO.:	US 1999-214645	A1	19990927 (9)
	WO 1997-US12239		19970709
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	LISA A. HAILE PH.D., GRAY CARY WARE & FREIDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1600, SAN DIEGO, CA, 92121		
NUMBER OF CLAIMS:	8		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Page(s)		
LINE COUNT:	2551		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 32 OF 84 USPATFULL

TI Exonuclease-mediated gene assembly in directed evolution

AB A directed evolution process comprising novel methods for generating
improved progeny molecules having desirable properties, including, for
example, a **method** for rapid and facilitated **production**
from a parental polynucleotide template, of a set of mutagenized progeny
polynucleotides wherein at least one codon encoding each of the 20
naturally encoded amino acids is represented at each original codon
position. This **method**, termed site-saturation mutagenesis, or
simply saturation mutagenesis, is preferably based on the use of the
degenerate N,N,G/T sequence. Also, a **method** of producing from
a parental polypeptide template, a set of mutagenized progeny
polypeptides wherein each of the 20 naturally encoded amino acids is

represented at each original amino acid position. Also, other mutagenization processes that can be used in combination with, or in lieu of, saturation mutagenesis, including, for example: (a) assembly and/or reassembly of polynucleotide building blocks (including sections of genes &/or of gene families) mediated by a source of exonuclease activity such as exonuclease III; and (b) introduction of two or more related polynucleotides into a suitable host cell such that a hybrid polynucleotide is generated by recombination and reductive reassortment. Also molecular property screening methods, including a preferred **method**, termed end selection, comprised of using an enzyme, such as a topoisomerase, a restriction endonuclease, &/or a nicking enzyme (such as N. BstNB I), to detect a specific terminal sequence in a working polynucleotide, to produce a ligatable end thereat, and to ligate and clone the working polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:45482 USPATFULL
 TITLE: Exonuclease-mediated gene assembly in directed evolution
 INVENTOR(S): Short, Jay M., Encinitas, CA, United States
 Frey, Gerhard J., San Diego, CA, United States
 Djavakhishvili, Tsotne D., San Diego, CA, United States
 PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 6352842	B1	20020305
APPLICATION INFO.:	US 1999-276860		19990326 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, now patented, Pat. No. US 6238884		
	Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, now patented, Pat. No. US 6171820		
	Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696		
	Continuation-in-part of Ser. No. US 1997-962504, filed on 31 Oct 1997, now abandoned Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965408		
	Continuation-in-part of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat. No. US 5939250		

	NUMBER	DATE
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PRIORITY INFORMATION:	US 1995-8311P	19951207 (60)
	US 1995-8316P	19951207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Park, Hankyel T.	
LEGAL REPRESENTATIVE:	Gray Cary Ware & Freidenrich LLP, Haile, Lisa A., Shen, Greg	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	4817	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 33 OF 84 USPATFULL

TI Expressed sequences of arabidopsis thaliana
 AB Isolated nucleotide compositions and sequences are provided for Arabidopsis thaliana genes. The nucleic acid compositions find use in identifying homologous or related genes; in producing compositions that

modulate the expression or function of its encoded protein, mapping functional regions of the protein; and in studying associated physiological pathways. The genetic sequences may also be used for the genetic manipulation of cells, particularly of plant cells. The encoded gene products and modified organisms are useful for screening of biologically active agents, e.g. fungicides, insecticides, etc.; for elucidating biochemical pathways; and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:38558 USPATFULL
 TITLE: Expressed sequences of arabidopsis thaliana
 INVENTOR(S): Gorlach, Jorn, Durham, NC, UNITED STATES
 An, Yong-Qiang, San Diego, CA, UNITED STATES
 Hamilton, Carol M., Apex, NC, UNITED STATES
 Price, Jennifer L., Raleigh, NC, UNITED STATES
 Raines, Tracy M., Durham, NC, UNITED STATES
 Yu, Yang, Martinsville, NJ, UNITED STATES
 Rameaka, Joshua G., Durham, NC, UNITED STATES
 Page, Amy, Durham, NC, UNITED STATES
 Mathew, Abraham V., Cary, NC, UNITED STATES
 Ledford, Brooke L., Holly Springs, NC, UNITED STATES
 Woessner, Jeffrey P., Hillsborough, NC, UNITED STATES
 Haas, William David, Durham, NC, UNITED STATES
 Garcia, Carlos A., Carrboro, NC, UNITED STATES
 Kricker, Maja, Pittsboro, NC, UNITED STATES
 Slater, Ted, Apex, NC, UNITED STATES
 Davis, Keith R., Durham, NC, UNITED STATES
 Allen, Keith, Cary, NC, UNITED STATES
 Hoffman, Neil, Chapel Hill, NC, UNITED STATES
 Hurban, Patrick, Raleigh, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002023280	A1	20020221
APPLICATION INFO.:	US 2001-770444	A1	20010126 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-178502P	20000127 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PARADIGM GENETICS, INC, 104 ALEXANDER DRIVE, BUILDING 2, P O BOX 14528, RTP, NC, 277094528	
NUMBER OF CLAIMS:	27	
EXEMPLARY CLAIM:	1	
LINE COUNT:	3845	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 34 OF 84 USPATFULL
 TI Methods for recombining nucleic acids
 AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:24196 USPATFULL
 TITLE: Methods for recombining nucleic acids

INVENTOR(S): Stemmer, Willem P.C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6344356	B1	20020205
APPLICATION INFO.:	US 2000-590778		20000608 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-621859, filed on 25 Mar 1996, now patented, Pat. No. US 6117679 Continuation-in-part of Ser. No. US 1995-564955, filed on 30 Nov 1995, now patented, Pat. No. US 5811238 Continuation-in-part of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Kruse, Norman J., Quine, Jonathan Alan, Law Offices of Jonathan Alan Quine		
NUMBER OF CLAIMS:	37		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	72 Drawing Figure(s); 37 Drawing Page(s)		
LINE COUNT:	6408		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L5 ANSWER 35 OF 84 USPATFULL

TI Arrays for identifying agents which mimic or inhibit the activity of interferons

AB Methods and model systems for identifying and characterizing new therapeutic agents, particularly proteins, which mimic or inhibit the activity of all interferons, Type I interferons, IFN- α , IFN- β , or IFN- γ . The **method** comprises administering an interferon selected from the group consisting of IFN- α , IFN- β , IFN- τ , IFN- ω , IFN- γ , and combinations thereof to cultured cells, administering the candidate agent to a duplicate culture of cells; and measuring the effect of the candidate agent and the interferon on the transcription or translation of one or, preferably, a plurality of the interferon stimulated genes or the interferon repressed genes (hereinafter referred to as "ISG's" and "IRGs", respectively). The model system is an array with gene probes that hybridize with from about 100 to about 5000 ISG and IRG transcripts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:231143 USPATFULL

TITLE: Arrays for identifying agents which mimic or inhibit the activity of interferons

INVENTOR(S): Silverman, Robert H., Beachwood, OH, United States
Williams, Bryan R. G., Cleveland, OH, United States
Der, Sandy, Cleveland, OH, United States

PATENT ASSIGNEE(S): The Cleveland Clinic Foundation, Cleveland, OH, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6331396	B1	20011218
APPLICATION INFO.:	US 1999-405438		19990923 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101497P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Zitomer, Stephanie
ASSISTANT EXAMINER: Forman, B J
LEGAL REPRESENTATIVE: Calfee, Halter & Griswold LLP
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 9639
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 36 OF 84 USPATFULL

TI Methods for modulating cellular and organismal phenotypes
AB Methods for identifying and controlling the genetic and metabolic pathways underlying complex phenotypes are provided. Conjoint polynucleotide segments that contribute to or disrupt elements of a multigenic phenotype are produced and expressed in cells of interest. Conjoint polynucleotide segments are recombined and/or mutated to give rise to libraries of recombinant concatamers which are expressed in cells of interest. Libraries of conjoint polynucleotide segments and recombinant concatamers are expressed episomally or integrated into the DNA of organelles or chromosomes. Cells are screened or selected to identify members of the population of cells exhibiting a desired phenotype. Libraries and vectors comprising conjoint polynucleotide segments and recombinant concatamers, as well as cells expressing such libraries and vectors or their components are provided. Kits containing conjoint polynucleotide segments, recombinant concatamers, vectors including such polynucleotides, and cells including such polynucleotides and vectors are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:223887 USPATFULL
TITLE: Methods for modulating cellular and organismal phenotypes
INVENTOR(S): Stemmer, Willem P.C., Los Gatos, CA, United States
Minshull, Jeremy, Menlo Park, CA, United States
Keenan, Robert J., San Francisco, CA, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001049104	A1	20011206
APPLICATION INFO.:	US 2001-817015	A1	20010323 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-191782P	20000324 (60)
	US 2001-262617P	20010117 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	LAW OFFICES OF JONATHAN ALAN QUINE, P O BOX 458, ALAMEDA, CA, 94501	
NUMBER OF CLAIMS:	185	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Page(s)	
LINE COUNT:	3382	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 37 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method**

for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:214886 USPATFULL
TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6323030	B1	20011127
APPLICATION INFO.:	US 1999-240310		19990129 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-621859, filed on 25 Mar 1996, now patented, Pat. No. US 6117679 Continuation-in-part of Ser. No. US 1995-564955, filed on 30 Nov 1995, now patented, Pat. No. US 5811238 Continuation-in-part of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisnant, Ethan		
LEGAL REPRESENTATIVE:	Kruse, Norman J., Quine, Jonathan Alan The Law Offices of Jonathan Alan Quine		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	72 Drawing Figure(s); 37 Drawing Page(s)		
LINE COUNT:	6066		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 38 OF 84 USPATFULL
TI Chemically assembled nano-scale circuit elements
AB The present invention provides nano-scale devices, including electronic circuits, using DNA molecules as a support structure. DNA binding proteins are used to mask regions of the DNA as a material, such as a metal is coated onto the DNA. Included in the invention are DNA based transistors, capacitors, inductors and diodes. The present invention also provides methods of making integrated circuits using DNA molecules as a support structure. Methods are also included for making DNA based transistors, capacitors, inductors and diodes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:212120 USPATFULL
TITLE: Chemically assembled nano-scale circuit elements
INVENTOR(S): Connolly, Dennis Michael, Rochester, NY, United States
PATENT ASSIGNEE(S): Integrated Nano-Technologies, LLC. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001044114	A1	20011122
APPLICATION INFO.:	US 2001-860046	A1	20010517 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-315750, filed on 20 May 1999, GRANTED, Pat. No. US 6248529		

	NUMBER	DATE
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PRIORITY INFORMATION:	US 1998-86163P	19980520 (60)
	US 1998-95096P	19980803 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Gunnar G. Leinberg, NIXON PEABODY LLP, Clinton Square, P.O. Box 31051, Rochester, NY, 14603	
NUMBER OF CLAIMS:	71	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	1302	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L5 ANSWER 39 OF 84 USPATFULL

TI Oligonucleotides which specifically bind retroviral nucleocapsid proteins

AB The invention provides oligonucleotides which bind to retroviral nucleocapsid proteins with high affinity, molecular decoys for retroviral nucleocapsid proteins which inhibit viral replication, targeted molecules comprising high affinity oligonucleotides, assays for selecting test compounds, and related kits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:202380 USPATFULL

TITLE: Oligonucleotides which specifically bind retroviral nucleocapsid proteins

INVENTOR(S): Rein, Alan, Columbia, MD, United States
Casas-Finet, Jose, Gaithersburg, MD, United States
Fisher, Robert, Sharpsburg, MD, United States
Fivash, Matthew, Frederick, MD, United States
Henderson, Louis E., Mount Airy, MD, United States

PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 6316190	B1	20011113
	WO 9744064		19971127
APPLICATION INFO.:	US 1999-180903		19990712 (9)
	WO 1997-US8936		19970519
			19990712 PCT 371 date
			19990712 PCT 102(e) date

	NUMBER	DATE
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PRIORITY INFORMATION:	US 1996-17128P	19960520 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Park, Hankyel T.	
LEGAL REPRESENTATIVE:	Townsend & Townsend & Crew LLP	
NUMBER OF CLAIMS:	37	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 8 Drawing Page(s)	
LINE COUNT:	2237	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L5 ANSWER 40 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination

AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:167941 USPATFULL
TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6297053	B1	20011002
APPLICATION INFO.:	US 2000-501698		20000210 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-133508, filed on 12 Aug 1998 Continuation of Ser. No. US 1998-100856, filed on 19 Jun 1998, now patented, Pat. No. US 6132970 Continuation of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Kruse, Esq., Norman J., Quin, Esq., Jonathan AlanLaw Office of Jonathan Alan Quine		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	3937		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 41 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:158074 USPATFULL
TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 6291242 B1 20010918
 APPLICATION INFO.: US 1998-165060 19981002 (9)
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-621859, filed on 25
 Mar 1996, now patented, Pat. No. US 6117679
 Continuation-in-part of Ser. No. US 537874, now
 patented, Pat. No. US 5830721 Continuation-in-part of
 Ser. No. US 1995-564965, filed on 30 Nov 1995, now
 patented, Pat. No. US 5811238 Continuation-in-part of
 Ser. No. US 1994-198431, filed on 17 Feb 1994, now
 patented, Pat. No. US 5605793
 DOCUMENT TYPE: Utility
 FILE SEGMENT: GRANTED
 PRIMARY EXAMINER: Whisenant, Ethan
 LEGAL REPRESENTATIVE: Liebeschuetz, Joe, Kruse, Norman
 NUMBER OF CLAIMS: 21
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 72 Drawing Figure(s); 37 Drawing Page(s)
 LINE COUNT: 5808
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 42 OF 84 USPATFULL
 TI Systematic evolution of ligands by exponential enrichment:
 photoselection of nucleic acid ligands and solution selex
 AB A **method** for identifying nucleic acid ligands to target
 molecules using the SELEX procedure wherein the candidate nucleic acids
 contain photoreactive groups and nucleic acid ligands identified thereby
 are claimed. The complexes of increased affinity nucleic acids and
 target molecules formed in the procedure are crosslinked by irradiation
 to facilitate separation from unbound nucleic acids. In other methods
 partitioning of high and low affinity nucleic acids is facilitated by
 primer extension steps as shown in the figure in which chain termination
 nucleotides, digestion resistant nucleotides or nucleotides that allow
 retention of the cDNA product on an affinity matrix are differentially
 incorporated into the cDNA products of either the high or low affinity
 nucleic acids and the cDNA products are treated accordingly to
 amplification, enzymatic or chemical digestion or by contact with an
 affinity matrix.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 ACCESSION NUMBER: 2001:158016 USPATFULL
 TITLE: Systematic evolution of ligands by exponential
 enrichment: photoselection of nucleic acid ligands and
 solution selex
 INVENTOR(S): Gold, Larry, Boulder, CO, United States
 Willis, Michael, Louisville, CO, United States
 Koch, Tad, Boulder, CO, United States
 Ringquist, Steven, Lyons, CO, United States
 Jensen, Kirk, Boulder, CO, United States
 Atkinson, Brent, Boulder, CO, United States
 PATENT ASSIGNEE(S): SomaLogic, Inc., Boulder, CA, United States (U.S.
 corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6291184	B1	20010918
APPLICATION INFO.:	US 1999-459553		19991213 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-93293, filed on 8 Jun 1998, now patented, Pat. No. US 6001577 Continuation of Ser. No. US 612895, now patented, Pat. No. US 5763177 Continuation-in-part of Ser. No. US 1993-123935, filed on 17 Sep 1993, now abandoned Continuation-in-part of		

Ser. No. US 1993-143564, filed on 25 Oct 1993, now abandoned Continuation-in-part of Ser. No. US 1991-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 Continuation-in-part of Ser. No. US 1990-536428, filed on 11 Jun 1990, now abandoned, said Ser. No. US 612895 Continuation-in-part of Ser. No. US 1992-931473, filed on 17 Aug 1992, now patented, Pat. No. US 5270163 Division of Ser. No. US 714131

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Zitomer, Stephanie
LEGAL REPRESENTATIVE: Swanson & Bratschun, L.L.C.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 35 Drawing Page(s)
LINE COUNT: 2330
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 43 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:152769 USPATFULL
TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
Cramer, Andreas, Mountain View, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6287861	B1	20010911
APPLICATION INFO.:	US 1998-133508		19980812 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenaut, Ethan		
LEGAL REPRESENTATIVE:	Liebeschuetz, Joe, Kruse, Norman		
NUMBER OF CLAIMS:	94		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	13 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	4081		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 44 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
AB A **method** for DNA reassembly after random fragmentation, and

its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:136443 USPATFULL
TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6277638	B1	20010821
APPLICATION INFO.:	US 1999-232863		19990115 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1998-100856, filed on 19 Jun 1998, now patented, Pat. No. US 6132970 Continuation of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Liebeschuetz, Joe, Kruse, Norman		
NUMBER OF CLAIMS:	73		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	19 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	4027		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 45 OF 84 USPATFULL

TI **Method** of chemically assembling nano-scale devices
AB The present invention provides nano-scale devices, including electronic circuits, using DNA molecules as a support structure. DNA binding proteins are used to mask regions of the DNA as a material, such as a metal is coated onto the DNA. Included in the invention are DNA based transistors, capacitors, inductors and diodes. The present invention also provides methods of making integrated circuits using DNA molecules as a support structure. Methods are also included for making DNA based transistors, capacitors, inductors and diodes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:93296 USPATFULL
TITLE: **Method** of chemically assembling nano-scale devices
INVENTOR(S): Connolly, Dennis Michael, Rochester, NY, United States
PATENT ASSIGNEE(S): Integrated Nano-Technologies, LLC, Rochester, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6248529	B1	20010619
APPLICATION INFO.:	US 1999-315750		19990520 (9)

NUMBER	DATE
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PRIORITY INFORMATION: US 1998-86163P 19980520 (60)
 US 1998-95096P 19980803 (60)
 DOCUMENT TYPE: Utility
 FILE SEGMENT: GRANTED
 PRIMARY EXAMINER: Horlick, Kenneth R.
 ASSISTANT EXAMINER: Siew, Jeffrey
 LEGAL REPRESENTATIVE: Nixon Peabody LLP
 NUMBER OF CLAIMS: 32
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
 LINE COUNT: 1011
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 46 OF 84 USPATFULL

TI **Zinc finger** protein derivatives and methods therefor
 AB The present invention provides **zinc finger** nucleotide binding polypeptide variants that have at least two **zinc finger** modules that bind to a target cellular nucleotide sequence and modulate the transcriptional function of the cellular nucleotide sequence. Also provided are methods of use of such **zinc finger** nucleotide binding polypeptide variants and methods for isolating the same using expression libraries encoding the polypeptide variants containing randomized substitutions of amino acids. Exemplary **zinc finger** nucleotide binding polypeptide variants of the invention include two cysteines and two histidines whereby both cysteines are amino proximal to both histidines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:82893 USPATFULL
 TITLE: **Zinc finger** protein derivatives and methods therefor
 INVENTOR(S): Barbas, III, Carlos F., San Diego, CA, United States
 Gottesfeld, Joel M., San Diego, CA, United States
 Wright, Peter E., La Jolla, CA, United States
 PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6242568	B1	20010605
	WO 9519431		19950720
APPLICATION INFO.:	US 1996-676318		19961230 (8)
	WO 1995-US829		19950118
			19961230 PCT 371 date
			19961230 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-312604, filed on 28 Sep 1994, now abandoned Continuation-in-part of Ser. No. US 1994-183119, filed on 18 Jan 1994, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Achutamurthy, Ponnathapu		
ASSISTANT EXAMINER:	Moore, William W.		
LEGAL REPRESENTATIVE:	Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.		
NUMBER OF CLAIMS:	56		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	26 Drawing Figure(s); 23 Drawing Page(s)		
LINE COUNT:	3179		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L5 ANSWER 47 OF 84 USPATFULL

TI End selection in directed evolution

AB A directed evolution process comprising novel methods for generating improved progeny molecules having desirable properties, including, for example, a **method** for rapid and facilitated **production** from a parental polynucleotide template, of a set of mutagenized progeny polynucleotides wherein at least one codon encoding each of the 20 naturally encoded amino acids is represented at each original codon position. This **method**, termed site-saturation mutagenesis, or simply saturation mutagenesis, is preferably based on the use of the degenerate N,N,G/T sequence. Also, a **method** of producing from a parental polypeptide template, a set of mutagenized progeny polypeptides wherein each of the 20 naturally encoded amino acids is represented at each original amino acid position. Also, other mutagenization processes that can be used in combination with, or in lieu of, saturation mutagenesis, including, for example: (a) assembly and/or reassembly of polynucleotide building blocks, which building blocks can be sections of genes &/or of gene families; and (b) introduction of two or more related polynucleotides into a suitable host cell such that a hybrid polynucleotide is generated by recombination and reductive reassortment. Also, vector and expression vehicles including such polynucleotides and correspondingly expressed polypeptides. Also molecular property screening methods, including a preferred **method**, termed end selection, comprised of using an enzyme, such as a topoisomerase, a restriction endonuclease, &/or a nicking enzyme (such as N. BstNB I), to detect a specific terminal sequence in a working polynucleotide, to produce a ligatable end thereat, and to ligate and clone the working polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:78911 USPATFULL
TITLE: End selection in directed evolution
INVENTOR(S): Short, Jay M., Encinitas, CA, United States
Frey, Gerhard Johann, San Diego, CA, United States
PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6238884	B1	20010529
APPLICATION INFO.:	US 1999-267118		19990309 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-8311P	19951207 (60)
	US 1995-8316P	19951207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Park, Hankyel T.	
LEGAL REPRESENTATIVE:	Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	4534	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 48 OF 84 USPATFULL

TI Nucleic acid encoding mammalian mu opioid receptor

AB The invention relates generally to compositions of and methods for

obtaining mu opioid receptor polypeptides. The invention relates as well to polynucleotides encoding mu opioid receptor polypeptides, the recombinant vectors carrying those sequences, the recombinant host cells including either the sequences or vectors, and recombinant opioid receptor polypeptides. The invention includes as well, methods for using the isolated, recombinant receptor polypeptide in assays designed to select and improve substances capable of interacting with mu opioid receptor polypeptides for use in diagnostic, drug design and therapeutic applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:75149 USPATFULL
 TITLE: Nucleic acid encoding mammalian mu opioid receptor
 INVENTOR(S): Yu, Lei, Indianapolis, IN, United States
 PATENT ASSIGNEE(S): Advanced Research & Technology Institute, Indianapolis, IN, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6235496	B1	20010522
APPLICATION INFO.:	US 1993-120601		19930913 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-56886, filed on 8 Mar 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Kunz, Gary L.		
ASSISTANT EXAMINER:	Landsman, Robert S.		
LEGAL REPRESENTATIVE:	Fulbright & Jaworski LLP		
NUMBER OF CLAIMS:	15		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 5 Drawing Page(s)		
LINE COUNT:	2811		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 49 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination

AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:14264 USPATFULL
 TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
 INVENTOR(S): Stemmer, Willem P.C., Los Gatos, CA, United States
 PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6180406	B1	20010130
APPLICATION INFO.:	US 1998-99015		19980617 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1996-621859, filed on 25 Mar 1996 Continuation-in-part of Ser. No. US 1995-564955, filed on 30 Nov 1995, now patented, Pat. No. US 5811238		

Continuation-in-part of Ser. No. US 537874, now patented, Pat. No. US 5830721 Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994, now patented, Pat. No. US 5605793

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Whisenant, Ethan
LEGAL REPRESENTATIVE: Liebeschuetz, Joe, Kruse, Norman
NUMBER OF CLAIMS: 69
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 37 Drawing Figure(s); 37 Drawing Page(s)
LINE COUNT: 6183
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 50 OF 84 USPATFULL

TI Saturation mutagenesis in directed evolution

AB Disclosed is a rapid and facilitated **method** of producing from a parental template polynucleotide, a set of mutagenized progeny polynucleotides whereby at each original codon position there is produced at least one substitute codon encoding each of the 20 naturally encoded amino acids. Accordingly, there is also provided a **method** of producing from a parental template polypeptide, a set of mutagenized progeny polypeptides wherein each of the 20 naturally encoded amino acids is represented at each original amino acid position. The **method** provided is termed site-saturation mutagenesis, or simply saturation mutagenesis, and can be used in combination with other mutagenization processes, such as, for example, a process wherein two or more related polynucleotides are introduced into a suitable host cell such that a hybrid polynucleotide is generated by recombination and reductive reassortment. Also provided are vector and expression vehicles including such polynucleotides, polypeptides expressed by the hybrid polynucleotides and a **method** for screening for hybrid polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:4494 USPATFULL
TITLE: Saturation mutagenesis in directed evolution
INVENTOR(S): Short, Jay M., Encinitas, CA, United States
PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6171820	B1	20010109
APPLICATION INFO.:	US 1999-246178		19990204 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation-in-part of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1997-962504, filed on 31 Oct 1997 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965405, issued on 12 Oct 1999 Continuation-in-part of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat. No. US 5939250, issued on 17 Aug 1999		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-8311P	19951207 (60)
	US 1995-8316P	19951207 (60)
DOCUMENT TYPE:	Patent	

FILE SEGMENT: Granted
PRIMARY EXAMINER: Park, Hankyel T.
LEGAL REPRESENTATIVE: Gary Cary Ware & Freidenrich LLP, Haile, Lisa A.
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 3968
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 51 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:174421 USPATFULL
TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6165793		20001226
APPLICATION INFO.:	US 1998-75511		19980508 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-621859, filed on 25 Mar 1996		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jones, W. Gary		
ASSISTANT EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Liebeschuetz, Joe, Kruse, Norman		
NUMBER OF CLAIMS:	62		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	37 Drawing Figure(s); 37 Drawing Page(s)		
LINE COUNT:	6603		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 52 OF 84 USPATFULL

TI Compositions and methods of use of mammalian retrotransposons
AB The invention relates to an isolated DNAC molecule comprising a promoter P and an L1 cassette sequence comprising a core L1 retrotransposon element and methods of use thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:157213 USPATFULL
TITLE: Compositions and methods of use of mammalian retrotransposons
INVENTOR(S): Kazazian, Jr., Haig H., Baltimore, MD, United States
Boeke, Jef D., Baltimore, MD, United States
Moran, John V., Exton, PA, United States
Dombroski, Beth A., Springfield, PA, United States
PATENT ASSIGNEE(S): The John Hopkins University, Baltimore, MD, United

States (U.S. corporation)
The Trustees of the University of Pennsylvania,
Philadelphia, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6150160		20001121
APPLICATION INFO.:	US 1997-847844		19970428 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1996-749805, filed on 15 Nov 1996, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-6831P	19951116 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Chambers, Jasmine	
ASSISTANT EXAMINER:	Baker, Anne-Marie	
LEGAL REPRESENTATIVE:	Akin, Gump, Strauss, Hauer & Feld, L.L.P.	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 33 Drawing Page(s)	
LINE COUNT:	3799	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L5 ANSWER 53 OF 84 USPATFULL

TI **Zinc finger** protein derivatives and methods therefor
AB **Zinc finger** proteins of the Cys.sub.2 His.sub.2 type represent a class of malleable DNA binding proteins which may be selected to bind diverse sequences. Typically, **zinc finger** proteins containing three **zinc finger** domains, like the murine transcription factor Zif268 and the human transcription factor Spl, bind nine contiguous base pairs (bp). To create a class of proteins which would be generally applicable to target unique sites within complex genomes, the present invention provides a polypeptide linker that fuses two three-finger proteins. Two six-fingered proteins were created and demonstrated to bind 18 contiguous bp of DNA in a sequence specific fashion. Expression of these proteins as fusions to activation or repression domains allows transcription to be specifically up or down modulated within cells. Polydactyl **zinc finger** proteins are broadly applicable as genome-specific transcriptional switches in gene therapy strategies and the development of novel transgenic plants and animals. Such proteins are useful for inhibiting, activating or enhancing gene expression from a **zinc finger**-nucleotide binding motif containing promoter or other transcriptional control element, as well as a structural gene or RNA sequence.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:146512 USPATFULL
TITLE: **Zinc finger** protein derivatives and methods therefor
INVENTOR(S): Barbas, III, Carlos F., San Diego, CA, United States
Gottesfeld, Joel M., Del Mar, CA, United States
Wright, Peter E., La Jolla, CA, United States
PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6140466		20001031
APPLICATION INFO.:	US 1997-863813		19970527 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 676318
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Achutamurthy, Ponnathapu
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.
NUMBER OF CLAIMS: 54
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 32 Drawing Figure(s); 26 Drawing Page(s)
LINE COUNT: 4196
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 54 OF 84 USPATFULL

TI Methods of shuffling polynucleotides

AB The invention is directed to methods of shuffling polynucleotide variants. The methods entail conducting a multi-cyclic polynucleotide extension process on partially annealed polynucleotide strands having sequences from the plurality of chosen polynucleotide variants, the polynucleotide strands having regions of similarity and regions of heterology with each other and being partially annealed through the regions of similarity, under conditions whereby one strand serves as a template for extension of another strand with which it is partially annealed to generate a population of shuffled polynucleotides. Shuffled polynucleotides are then selected or screened to identify a shuffled polynucleotide having a desired functional property.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:138060 USPATFULL
TITLE: Methods of shuffling polynucleotides
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6132970		20001017
APPLICATION INFO.:	US 1998-100856		19980619 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 537874		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jones, W. Gary		
ASSISTANT EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Liebeschuetz, Esq., Joe, Kruse, Esq., Norman		
NUMBER OF CLAIMS:	47		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	4219		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 55 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination

AB A **method** for DNA reassembly after random fragmentation, and its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:121322 USPATFULL
TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Maxygen, Inc., Redwood City, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6117679		20000912
APPLICATION INFO.:	US 1996-621859		19960325 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-564955, filed on 30 Nov 1995, now patented, Pat. No. US 5811238 which is a continuation-in-part of Ser. No. US 537874		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jones, W. Gary		
ASSISTANT EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Kruse, Norman J., Liebeschuetz, Joe		
NUMBER OF CLAIMS:	35		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	72 Drawing Figure(s); 37 Drawing Page(s)		
LINE COUNT:	6708		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 56 OF 84 USPATFULL
TI Polynucleotide encoding mu opioid receptor
AB The invention relates generally to compositions of and methods for obtaining mu opioid receptor polypeptides. The invention relates as well to polynucleotides encoding mu opioid receptor polypeptides, the recombinant vectors carrying those sequences, the recombinant host cells including either the sequences or vectors, recombinant opioid receptor polypeptides, and antibodies immunoreactive with mu opioid receptors. The invention includes as well, methods for using the isolated, recombinant receptor polypeptide in assays designed to select and improve substances capable of interacting with mu opioid receptor polypeptides for use in diagnostic, drug design and therapeutic applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:105677 USPATFULL
TITLE: Polynucleotide encoding mu opioid receptor
INVENTOR(S): Yu, Lei, Indianapolis, IN, United States
PATENT ASSIGNEE(S): Indiana University, Indianapolis, IN, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6103492		20000815
APPLICATION INFO.:	US 1997-889108		19970707 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1994-305518, filed on 13 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-120601, filed on 13 Sep 1993 which is a continuation-in-part of Ser. No. US 1993-56886, filed on 8 Mar 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Kunz, Gary L.		
ASSISTANT EXAMINER:	Landsman, Robert		
LEGAL REPRESENTATIVE:	Fulbright & Jaworski		
NUMBER OF CLAIMS:	37		

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 26 Drawing Figure(s); 27 Drawing Page(s)
LINE COUNT: 6028
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 57 OF 84 USPATFULL

TI Compositions containing nucleic acids and ligands for therapeutic treatment

AB Preparations of conjugates of a receptor-binding internalized ligand and a cytocide-encoding agent and compositions containing such preparations are provided. The conjugates contain a polypeptide that is reactive with an FGF receptor, such as bFGF, or another heparin-binding growth factor, cytokine, or growth factor coupled to a nucleic acid binding domain. One or more linkers may be used in the conjugation. The linker is selected to increase the specificity, toxicity, solubility, serum stability, or intracellular availability, and promote nucleic acid condensation of the targeted moiety. The conjugates are complexed with a cytocide-encoding agent, such as DNA encoding saporin. Conjugates of a receptor-binding internalized ligand to a nucleic acid molecule are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:31403 USPATFULL
TITLE: Compositions containing nucleic acids and ligands for therapeutic treatment
INVENTOR(S): Baird, J. Andrew, San Diego, CA, United States
Chandler, Lois Ann, Encinitas, CA, United States
Sosnowski, Barbara A., Coronado, CA, United States
PATENT ASSIGNEE(S): Selective Genetics, Inc., La Jolla, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6037329		20000314
APPLICATION INFO.:	US 1996-718904		19960924 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-441979, filed on 16 May 1995, now abandoned which is a continuation-in-part of Ser. No. US 1994-213446, filed on 15 Mar 1994, now abandoned Ser. No. US 1994-213447, filed on 15 Mar 1994, now abandoned Ser. No. US 1994-297961, filed on 29 Aug 1994, now abandoned And Ser. No. US 1994-305771, filed on 13 Sep 1994, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Priebe, Scott D.		
ASSISTANT EXAMINER:	Nguyen, Dave Trong		
LEGAL REPRESENTATIVE:	Seed and Berry LLP		
NUMBER OF CLAIMS:	35		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	34 Drawing Figure(s); 25 Drawing Page(s)		
LINE COUNT:	7163		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 58 OF 84 USPATFULL

TI Cobalt Schiff base compounds

AB The invention relates to novel cobalt compounds, having a general structure ##STR1## wherein Co is either Co(II) or Co(III), and each of the R groups is selected from the group consisting of hydrogen, alkyl, hydrophilic organic acid, alkyl amine, amine, alkyl alcohol, alcohol, polypeptide or nucleic acid. The invention further relates to methods of using such compounds to reduce the biological activity of proteins, particularly enzymes and **zinc finger**-containing

proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:170582 USPATFULL
TITLE: Cobalt Schiff base compounds
INVENTOR(S): Meade, Thomas J., Altadena, CA, United States
Takeuchi, Toshihiko, San Francisco, CA, United States
Gray, Harry B., Pasadena, CA, United States
Simon, Melvin, San Marino, CA, United States
Louie, Angelique Y., Pasadena, CA, United States
PATENT ASSIGNEE(S): California Institute of Technology, Pasadena, CA,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6008190		19991228
APPLICATION INFO.:	US 1995-570761		19951212 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-358068, filed on 15 Dec 1994		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Russel, Jeffrey E.		
LEGAL REPRESENTATIVE:	Flehr Hohbach Test Albritton & Herbert LLP, Trecartin, Esq., Richard F., Silva, Esq., Robin M.		
NUMBER OF CLAIMS:	21		
EXEMPLARY CLAIM:	10		
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	1652		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 59 OF 84 USPATFULL

TI Systematic evolution of ligands by exponential enrichment:
photoselection of nucleic acid ligands and solution selex

AB A **method** for identifying nucleic acid ligands to target
molecules using the SELEX procedure wherein the candidate nucleic acids
contain photoreactive groups and nucleic acid ligands identified thereby
are claimed. The complexes of increased affinity nucleic acids and
target molecules formed in the procedure are crosslinked by irradiation
to facilitate separation from unbound nucleic acids. In other methods
partitioning of high and low affinity nucleic acids is facilitated by
primer extension steps as shown in the figure in which chain termination
nucleotides, digestion resistant nucleotides or nucleotides that allow
retention of the cDNA product on an affinity matrix are differentially
incorporated into the cDNA products of either the high or low affinity
nucleic acids and the cDNA products are treated accordingly to
amplification, enzymatic or chemical digestion or by contact with an
affinity matrix.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:163433 USPATFULL
TITLE: Systematic evolution of ligands by exponential
enrichment: photoselection of nucleic acid ligands and
solution selex
INVENTOR(S): Gold, Larry, Boulder, CO, United States
Willis, Michael, Louisville, CO, United States
Koch, Tad, Boulder, CO, United States
Ringquist, Steven, Lyons, CO, United States
Jensen, Kirk, Boulder, CO, United States
Atkinson, Brent, Boulder, CO, United States
PATENT ASSIGNEE(S): NeXstar Pharmaceuticals, Inc., Boulder, CO, United
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6001577		19991214
APPLICATION INFO.:	US 1998-93293		19980608 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 612895		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Zitomer, Stephanie W.		
LEGAL REPRESENTATIVE:	Swanson & Bratschun LLC		
NUMBER OF CLAIMS:	16		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	29 Drawing Figure(s); 35 Drawing Page(s)		
LINE COUNT:	2750		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 60 OF 84 USPATFULL

TI Detection of nucleic acids by multiple sequential invasive cleavages

AB The present invention relates to means for the detection and characterization of nucleic acid sequences, as well as variations in nucleic acid sequences. The present invention also relates to methods for forming a nucleic acid cleavage structure on a target sequence and cleaving the nucleic acid cleavage structure in a site-specific manner. The structure-specific nuclease activity of a variety of enzymes is used to cleave the target-dependent cleavage structure, thereby indicating the presence of specific nucleic acid sequences or specific variations thereof. The present invention further relates to methods and devices for the separation of nucleic acid molecules based on charge. The present invention also provides methods for the detection of non-target cleavage products via the formation of a complete and activated protein binding region. The invention further provides sensitive and specific methods for the detection of human cytomegalovirus nucleic acid in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:155453 USPATFULL

TITLE: Detection of nucleic acids by multiple sequential invasive cleavages

INVENTOR(S): Hall, Jeff G., Madison, WI, United States
Lyamichev, Victor I., Madison, WI, United States
Mast, Andrea L., Madison, WI, United States
Brow, Mary Ann D., Madison, WI, United States

PATENT ASSIGNEE(S): Third Wave Technologies, Inc., Madison, WI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5994069		19991130
APPLICATION INFO.:	US 1997-823516		19970324 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 1997-US1072, filed on 21 Jan 1997 which is a continuation-in-part of Ser. No. US 1996-759038, filed on 2 Dec 1996 And a continuation-in-part of Ser. No. US 1996-758314, filed on 2 Dec 1996 which is a continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996 which is a continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996 which is a continuation-in-part of Ser. No. US 1996-599491, filed on 24 Jan 1996, said Ser. No. US 759038 which is a continuation-in-part of Ser. No. US 1996-756386, filed on 26 Nov 1996		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jones, W. Gary		

ASSISTANT EXAMINER: Shoemaker, Debra
LEGAL REPRESENTATIVE: Medlen & Carroll, LLP
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 169 Drawing Figure(s); 128 Drawing Page(s)
LINE COUNT: 14892
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 61 OF 84 USPATFULL

TI **Method** of DNA reassembly by interrupting synthesis

AB Disclosed is a process of performing Sexual PCR which includes generating random polynucleotides by interrupting or blocking a synthesis or amplification process to show or halt synthesis or amplification of at least one polynucleotide, optionally amplifying the polynucleotides, and reannealing the polynucleotides to produce random mutant polynucleotides. Also provided are vector and expression vehicles including such mutant polynucleotides, polypeptides expressed by the mutant polynucleotides and a **method** for producing random mutant polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:124744 USPATFULL

TITLE: **Method** of DNA reassembly by interrupting synthesis

INVENTOR(S): Short, Jay M., Encinitas, CA, United States

PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5965408		19991012
APPLICATION INFO.:	US 1996-677112		19960709 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Zitomer, Stephanie		
LEGAL REPRESENTATIVE:	Gray, Cary, Ware & Freidenrich, LLP, Haile, Ph. D., Lisa A.		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	2626		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 62 OF 84 USPATFULL

TI In vitro peptide and antibody display libraries

AB Improved methods and novel compositions for identifying peptides and single-chain antibodies that bind to predetermined receptors or epitopes. Such peptides and antibodies are identified by improved and novel methods for affinity screening of polysomes displaying nascent peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:78552 USPATFULL

TITLE: In vitro peptide and antibody display libraries

INVENTOR(S): Mattheakis, Larry C., Cupertino, CA, United States

Dower, William J., Menlo Park, CA, United States

PATENT ASSIGNEE(S): Affymax Technologies N.V., Greenford, United Kingdom (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5922545		19990713

APPLICATION INFO.: US 1997-902623 19970729 (8)
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-586176, filed on 17 Jan 1996, now abandoned which is a continuation-in-part of Ser. No. WO 1994-US12206, filed on 25 Oct 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-300262, filed on 2 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-144775, filed on 29 Oct 1993, now abandoned

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Wortman, Donna C.
 LEGAL REPRESENTATIVE: Stevens, Lauren L., Dunn, Tracy J.
 NUMBER OF CLAIMS: 4
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 11 Drawing Figure(s); 8 Drawing Page(s)
 LINE COUNT: 3543
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 63 OF 84 USPATFULL
 TI Methods for inactivating target DNA and for detecting conformational change in a nucleic acid
 AB The present invention reveals a **method** for enzymatically inactivating a target DNA, a **method** for detecting conformational change in a nucleic acid, and a **method** for detecting the presence of a target DNA molecule. The **method** for enzymatically inactivating a target DNA involves preparing a plasmid, phage, virus, or any other delivery vehicle such as a liposome containing a gene encoding a nuclease. The delivery vehicle is then delivered into cells. The cells are induced to produce the nuclease and the target DNA is then enzymatically inactivated. Alternatively, the nuclease protein is delivered directly to cells and used to enzymatically inactivate the target DNA. The **method** for detecting conformational change in a nucleic acid requires contacting a nucleic acid with a hybrid restriction nuclease, determining whether the hybrid restriction nuclease has interacted with the nucleic acid, and detecting the conformational change in the nucleic acid. The **method** for detecting the presence of a target DNA entails contacting a target DNA with a fusion protein, comprising a DNA binding protein joined to a detection domain such as the constant region of an immunoglobulin heavy chain molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:72487 USPATFULL
 TITLE: Methods for inactivating target DNA and for detecting conformational change in a nucleic acid
 INVENTOR(S): Chandrasegaran, Srinivasan, Baltimore, MD, United States
 PATENT ASSIGNEE(S): Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5916794		19990629
APPLICATION INFO.:	US 1996-647449		19960507 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-575361, filed on 20 Dec 1995, now patented, Pat. No. US 5792640 which is a continuation-in-part of Ser. No. US 1994-346293, filed on 23 Nov 1994, now patented, Pat. No. US 5487994 which is a continuation-in-part of Ser. No. US 1993-126564, filed on 27 Sep 1993, now patented, Pat. No. US 5436150, issued on 25 Jul 1995 which is a continuation-in-part of Ser. No. US 1993-17493, filed		

on 12 Feb 1993, now abandoned which is a
continuation-in-part of Ser. No. US 1992-862831, filed
on 3 Apr 1992, now patented, Pat. No. US 5356802

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Housel, James C.
ASSISTANT EXAMINER: Swartz, Rodney P.
LEGAL REPRESENTATIVE: Cushman Darby & Cushman, IP Group of Pillsbury, Madison
& Sutro
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 1533
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 64 OF 84 USPATFULL

TI Programmable genotoxic agents and uses therefor

AB The compositions and methods disclosed herein provide heterobifunctional
programmable genotoxic compounds that can be designed to kill selected
cells present in a heterogenous cell population. The present compounds
comprise a first agent that inflicts damage on cellular DNA, and a
second agent that attracts a macromolecular cell component such as a
protein, which in turn shields genomic lesions from repair. Unrepaired
lesions therefore persist in the cellular genome and contribute to the
death of selected cells. In contrast, lesions formed in nonselected
cells, which lack the cell component, are unshielded and thus are
repaired. As a result, compounds described herein are less toxic to
nonselected cells. Compounds of this invention can be designed to cause
the selective killing of transformed cells, viral-infected cells and the
like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:33847 USPATFULL
TITLE: Programmable genotoxic agents and uses therefor
INVENTOR(S): Essigmann, John M., Cambridge, MA, United States
Croy, Robert G., Belmont, MA, United States
Chen, Zhenghuan, Malden, MA, United States
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5882941		19990316
APPLICATION INFO.:	US 1994-239428		19940504 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Elliott, George C.		
ASSISTANT EXAMINER:	Brusca, John S.		
LEGAL REPRESENTATIVE:	Testa Hurwitz & Thibeault, LLP		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 8 Drawing Page(s)		
LINE COUNT:	2399		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 65 OF 84 USPATFULL

TI Programmable genotoxic agents and uses therefor

AB The compositions and methods disclosed herein provide heterobifunctional
programmable genotoxic compounds that can be designed to kill selected
cells present in a heterogenous cell population. The present compounds
comprise a first agent that inflicts damage on cellular DNA, and a
second agent that attracts a macromolecular cell component such as a
protein, which in turn shields genomic lesions from repair. Unrepaired

lesions therefore persist in the cellular genome and contribute to the death of selected cells. In contrast, lesions formed in nonselected cells, which lack the cell component, are unshielded and thus are repaired. As a result, compounds described herein are less toxic to nonselected cells. Compounds of this invention can be designed to cause the selective killing of transformed cells, viral-infected cells and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:30602 USPATFULL
 TITLE: Programmable genotoxic agents and uses therefor
 INVENTOR(S): Essigmann, John M., Cambridge, MA, United States
 Croy, Robert G., Belmont, MA, United States
 Yarema, Kevin J., Malden, MA, United States
 Morningstar, Marshall, Cambridge, MA, United States
 PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA,
 United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5879917		19990309
APPLICATION INFO.:	US 1995-434664		19950504 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1994-239428, filed on 4 May 1994		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Ketter, James		
ASSISTANT EXAMINER:	Brusca, John S.		
LEGAL REPRESENTATIVE:	Testa Hurwitz & Thibeault, LLP		
NUMBER OF CLAIMS:	19		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	21 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	2893		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 66 OF 84 USPATFULL

TI DNA mutagenesis by random fragmentation and reassembly
 AB A **method** for generating libraries of displayed peptides and/or antibodies (Abs) suitable for affinity interaction screening or phenotypic screening comprising: (i) obtaining selected library members comprising a displayed peptide and/or Ab and the corresponding polynucleotide (PN), or copies of it, (ii) pooling and fragmenting the PN, or copies of it, to form fragments, (iii) performing PCR amplification and thereby homologously recombining the fragments to form a shuffled pool of recombined PNs, which are not present in the selected library of (i).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:134871 USPATFULL
 TITLE: DNA mutagenesis by random fragmentation and reassembly
 INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
 Cramer, Andreas, Mountain View, CA, United States
 PATENT ASSIGNEE(S): Affymax Technologies N.V., Curacao, Netherlands
 Antilles (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5830721		19981103
	WO 9522625		19950824
APPLICATION INFO.:	US 1996-537874		19960304 (8)
	WO 1995-US2126		19950217
			19960304 PCT 371 date

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Jones, W. Gary
 ASSISTANT EXAMINER: Whisenant, Ethan
 LEGAL REPRESENTATIVE: Townsend & Townsend & Crew
 NUMBER OF CLAIMS: 28
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 15 Drawing Figure(s); 15 Drawing Page(s)
 LINE COUNT: 3865
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 67 OF 84 USPATFULL

TI Control of gene expression by ionizing radiation
 AB This invention relates to genetic constructs which comprise an enhancer-promoter region which is responsive to radiation, and at least one structural gene whose expression is controlled by the enhancer-promoter. This invention also relates to methods of destroying, altering, or inactivating cells in target tissue by delivering the genetic constructs to the cells of the tissues and inducing expression of the structural gene or genes in the construct by exposing the tissues to ionizing radiation. This invention is useful for treating patients with cancer, clotting disorders, myocardial infarction, and other diseases for which target tissues can be identified and for which gene expression of the construct within the target tissues can alleviate the disease or disorder.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:122387 USPATFULL
 TITLE: Control of gene expression by ionizing radiation
 INVENTOR(S): Weichselbaum, Ralph R., Chicago, IL, United States
 Hallahan, Dennis E., Chicago, IL, United States
 Sukhatme, Vikas P., Chicago, IL, United States
 Kufe, Donald W., Wellesley, MA, United States
 PATENT ASSIGNEE(S): Arch Development Corp., Chicago, IL, United States
 (U.S. corporation)
 Dana-Farber Cancer Institute, Boston, MA, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5817636		19981006
APPLICATION INFO.:	US 1995-486338		19950607 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1994-212308, filed on 14 Mar 1994, now patented, Pat. No. US 5612318 which is a continuation of Ser. No. US 1993-35897, filed on 18 Mar 1993, now abandoned which is a continuation of Ser. No. US 1990-633626, filed on 20 Dec 1990, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Campbell, Bruce R.		
LEGAL REPRESENTATIVE:	Arnold, White & Durkee		
NUMBER OF CLAIMS:	32		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	21 Drawing Figure(s); 10 Drawing Page(s)		
LINE COUNT:	1391		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 68 OF 84 USPATFULL

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
 AB A **method** for DNA reassembly after random fragmentation, and

its application to mutagenesis of nucleic acid sequences by in vitro or in vivo recombination is described. In particular, a **method** for the **production** of nucleic acid fragments or polynucleotides encoding mutant proteins is described. The present invention also relates to a **method** of repeated cycles of mutagenesis, shuffling and selection which allow for the directed molecular evolution in vitro or in vivo of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:115555 USPATFULL
 TITLE: Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
 INVENTOR(S): Stemmer, Willem P. C., Los Gatos, CA, United States
 Cramer, Andreas, Mountain View, CA, United States
 PATENT ASSIGNEE(S): Affymax Technologies N.V., De Ruyderkade, Netherlands
 Antilles (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5811238		19980922
APPLICATION INFO.:	US 1995-564955		19951130 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-198431, filed on 17 Feb 1994 And Ser. No. US 1996-537874, filed on 4 Mar 1996		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Jones, W. Gary		
ASSISTANT EXAMINER:	Whisenant, Ethan		
LEGAL REPRESENTATIVE:	Townsend & Townsend & Crew		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	22 Drawing Figure(s); 22 Drawing Page(s)		
LINE COUNT:	4466		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 69 OF 84 USPATFULL

TI Systematic evolution of ligands by exponential enrichment:
 photoselection of nucleic acid ligands and solution select
 AB A **method** for identifying nucleic acid ligands to target molecules using the SELEX procedure wherein the candidate nucleic acids contain photoreactive groups and nucleic acid ligands identified thereby are claimed. The complexes of increased affinity nucleic acids and target molecules formed in the procedure are crosslinked by irradiation to facilitate separation from unbound nucleic acids. In other methods partitioning of high and low affinity nucleic acids is facilitated by primer extension steps as shown in the figure in which chain termination nucleotides, digestion resistant nucleotides or nucleotides that allow retention of the cDNA product on an affinity matrix are differentially incorporated into the cDNA products of either the high or low affinity nucleic acids and the cDNA products are treated accordingly to amplification, enzymatic or chemical digestion or by contact with an affinity matrix.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:64969 USPATFULL
 TITLE: Systematic evolution of ligands by exponential enrichment: photoselection of nucleic acid ligands and solution select
 INVENTOR(S): Gold, Larry, Boulder, CO, United States
 Willis, Michael, Louisville, CO, United States
 Koch, Tad, Boulder, CO, United States

PATENT ASSIGNEE(S): Ringquist, Steven, Lyons, CO, United States
Jensen, Kirk, Boulder, CO, United States
Atkinson, Brent, Boulder, CO, United States
NeXstar Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5763177		19980609
	WO 9508003		19950323
APPLICATION INFO.:	US 1996-612895		19960308 (8)
	WO 1994-US10562		19940916
			19960308 PCT 371 date
			19960308 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-143564, filed on 25 Oct 1993, now abandoned And Ser. No. US 1993-123935, filed on 17 Sep 1993, now abandoned which is a continuation-in-part of Ser. No. US 1991-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 which is a continuation-in-part of Ser. No. US 1990-536428, filed on 11 Jun 1990, now abandoned, said Ser. No. US -143564 which is a continuation-in-part of Ser. No. US -714131 And Ser. No. US 1992-931473, filed on 17 Aug 1992, now patented, Pat. No. US 5270163, issued on 14 Dec 1993		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Zitomer, Stephanie W.		
LEGAL REPRESENTATIVE:	Swanson & Bratschun LLC		
NUMBER OF CLAIMS:	16		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	29 Drawing Figure(s); 35 Drawing Page(s)		
LINE COUNT:	2714		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L5 ANSWER 70 OF 84 USPATFULL

TI **Method** and device for diagnosing and distinguishing chest pain in early onset thereof

AB A diagnostic test, and a device for conducting the test, for assessing whether patient chest pain is cardiac in origin and for differentiating between unstable angina and myocardial infarction as a cause of patient chest pain is described. The diagnostic test comprises simultaneously detecting at least three selected cardiac markers with the use of at least three different monoclonal or polyclonal antibody pairs, each member of which is complementary to a different marker, which is released by heart muscle at varying stages after the onset of chest pain and is indicative of the cause of the chest pain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:48195 USPATFULL

TITLE: **Method** and device for diagnosing and distinguishing chest pain in early onset thereof

INVENTOR(S): Jackowski, George, Inglewood, Canada

PATENT ASSIGNEE(S): Spectral Diagnostics Inc., Toronto, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5747274		19980505
APPLICATION INFO.:	US 1996-697690		19960905 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-420298, filed on 11 Apr 1995, now patented, Pat. No. US 5604105 which is a		

continuation-in-part of Ser. No. US 1993-26453, filed on 3 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1991-695381, filed on 3 May 1991, now patented, Pat. No. US 5290678, issued on 1 Mar 1994

	NUMBER	DATE
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PRIORITY INFORMATION:	CA 1990-2027434	19901012
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Wolski, Susan	
LEGAL REPRESENTATIVE:	Klauber & Jackson	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 10 Drawing Page(s)	
LINE COUNT:	2438	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L5 ANSWER 71 OF 84 USPATFULL

TI **Method** and device for diagnosing and distinguishing chest pain in early onset thereof

AB A diagnostic test, and a device for conducting the test, for assessing whether patient chest pain is cardiac in origin and for differentiating between unstable angina and myocardial infarction as a cause of patient chest pain is described. The diagnostic test comprises simultaneously detecting at least three selected cardiac markers with the use of at least three different monoclonal or polyclonal antibody pairs, each member of which is complementary to a different marker, which is released by heart muscle at varying stages after the onset of chest pain and is indicative of the cause of the chest pain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:45097 USPATFULL

TITLE: **Method** and device for diagnosing and distinguishing chest pain in early onset thereof

INVENTOR(S): Jackowski, George, Inglewood, Canada

PATENT ASSIGNEE(S): Spectral Diagnostics Inc., Toronto, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 5744358		19980428
APPLICATION INFO.:	US 1996-707594		19960905 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-420298, filed on 11 Apr 1995, now patented, Pat. No. US 5604105 which is a continuation-in-part of Ser. No. US 1993-26453, filed on 3 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1991-695381, filed on 3 May 1991, now patented, Pat. No. US 5290678, issued on 1 Mar 1994		

	NUMBER	DATE
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PRIORITY INFORMATION:	CA 1990-2027434	19901012
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Wolski, Susan	
LEGAL REPRESENTATIVE:	Klauber & Jackson	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 10 Drawing Page(s)	

LINE COUNT: 2396
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 72 OF 84 USPATFULL

TI High affinity HIV-1 gag nucleic acid ligands
AB Methods are described for the identification and preparation of high-affinity nucleic acid ligands to HIV-1 GAG, Included in the invention are specific RNA ligands to HIV-1 GAG identified by the SELEX **method**, Also included are RNA ligands that inhibit the function of HIV-1 GAG.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:25078 USPATFULL
TITLE: High affinity HIV-1 gag nucleic acid ligands
INVENTOR(S): Lochrie, Michael A., Boulder, CO, United States
Gold, Larry, Boulder, CO, United States
PATENT ASSIGNEE(S): NeXstar Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5726017		19980310
APPLICATION INFO.:	US 1995-447172		19950519 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 , said Ser. No. US 1992-931473, filed on 17 Aug 1992, now patented, Pat. No. US 5270163 ; said Ser. No. US 1992-964624, filed on 21 Oct 1992, now patented, Pat. No. US 5496938 , said Ser. No. US 1993-117991, filed on 8 Sep 1993, now abandoned And Ser. No. US 1990-536428, filed on 11 Jun 1990, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Zitomer, Stephanie W.		
LEGAL REPRESENTATIVE:	Swanson & Bratschun LLC		
NUMBER OF CLAIMS:	10		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1124		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 73 OF 84 USPATFULL

TI **Method** and device for diagnosing and distinguishing chest pain in early onset thereof
AB This invention relates to a diagnostic tests and devices for conducting such tests at the point of care or in a diagnostic laboratory for accurate, simple, and rapid assessment of chest pain. In particular, the invention relates to differential diagnosis of the origin of chest pain, e.g., whether the pain is cardiac in origin, and for differentiating between unstable angina ("UA"), myocardial infarction ("MI"), congestive heart failure ("CHF"), and other ischemic events affecting the heart, at early onset of patient chest pain. The invention further relates to diagnosis of the stage of the MI in a patient suffering from MI, and to prognosis of such a patient. The present invention allows for the rapid, accurate, and sensitive diagnosis of a cardiac ischemic event in a patient complaining of chest pain, and determination of whether the event is unstable angina or myocardial infarction, by detecting the presence or absence of increased levels of at least three, and preferably four, biochemical markers present in blood or a blood fraction (serum, plasma) from a patient. The biochemical markers are heart proteins released during the ischemia. Release of different proteins occurs at different times and with different levels of ischemia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1998:6930 USPATFULL

TITLE: **Method** and device for diagnosing and distinguishing chest pain in early onset thereof

INVENTOR(S): Jackowski, George, Inglewood, Canada

PATENT ASSIGNEE(S): Spectral Diagnostics Inc., Toronto, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5710008		19980120
APPLICATION INFO.:	US 1996-735178		19961022 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-420298, filed on 11 Apr 1995, now patented, Pat. No. US 5604105 which is a continuation-in-part of Ser. No. US 1993-26453, filed on 3 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1991-695381, filed on 3 May 1991, now patented, Pat. No. US 5290678, issued on 1 Mar 1994		

	NUMBER	DATE
PRIORITY INFORMATION:	CA 1990-2027434	19901012
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Wolski, Susan	
LEGAL REPRESENTATIVE:	Klauber & Jackson	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	23	
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 10 Drawing Page(s)	
LINE COUNT:	2559	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 74 OF 84 USPATFULL

TI High affinity HIV Nucleocapsid nucleic acid ligands

AB Methods are described for the identification and preparation of high-affinity nucleic acid ligands to HIV-1 nucleocapsid. Included in the invention are specific RNA ligands to HIV-1 nucleocapsid identified by the SELEX **method**. Also included are RNA ligands that inhibit the function of HIV-1 nucleocapsid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 97:68325 USPATFULL

TITLE: High affinity HIV Nucleocapsid nucleic acid ligands

INVENTOR(S): Allen, Patrick Nikita, Boulder, CO, United States
Gold, Larry, Boulder, CO, United States

PATENT ASSIGNEE(S): NeXstar Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5654151		19970805
APPLICATION INFO.:	US 1995-477830		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 Ser. No. Ser. No. US 1992-931473, filed on 17 Aug 1992, now patented, Pat. No. US 5270163 Ser. No. Ser. No. US 1992-964624, filed on 21 Oct 1992, now patented, Pat. No. US 5496938 Ser. No. Ser. No. US 1993-117991, filed on 8 Sep 1993, now abandoned Ser. No. Ser. No. US 1994-361795, filed on 21 Dec 1994 And Ser. No. US		

1995-447172, filed on 19 May 1995 , said Ser. No. US
-714131 which is a continuation-in-part of Ser. No. US
1990-536428, filed on 11 Jun 1990, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Zitomer, Stephanie W.
LEGAL REPRESENTATIVE: Swanson & Bratschun LLC
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 1190
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 75 OF 84 USPATFULL

TI High affinity HIV nucleocapsid nucleic acid ligands
AB Methods are described for the identification and preparation of
high-affinity nucleic acid ligands to HIV-1 nucleocapsid. Included in
the invention are specific RNA ligands to HIV-1 nucleocapsid identified
by the SELEX **method** and RNA ligands that inhibit the function
of HIV-1 nucleocapsid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 97:47519 USPATFULL
TITLE: High affinity HIV nucleocapsid nucleic acid ligands
INVENTOR(S): Allen, Patrick, Boulder, CO, United States
Gold, Larry, Boulder, CO, United States
PATENT ASSIGNEE(S): NeXstar Pharmaceuticals, Inc., Boulder, CO, United
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5635615		19970603
APPLICATION INFO.:	US 1995-477530		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-714131, filed on 10 Jun 1991, now patented, Pat. No. US 5475096 Ser. No. Ser. No. US 1992-931473, filed on 17 Aug 1992, now patented, Pat. No. US 5270163 Ser. No. Ser. No. US 1992-964624, filed on 21 Oct 1992, now patented, Pat. No. US 5496938 Ser. No. Ser. No. US 1993-117991, filed on 8 Sep 1993, now abandoned Ser. No. Ser. No. US 1994-361795, filed on 21 Dec 1994 And Ser. No. US 1995-447172, filed on 19 May 1995 , said Ser. No. US -714131 which is a continuation-in-part of Ser. No. US 1990-536428, filed on 11 Jun 1990, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Zitomer, Stephanie W.
LEGAL REPRESENTATIVE: Swanson & Bratschun, LLC
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 1191
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 76 OF 84 USPATFULL

TI Control of gene expression by ionizing radiation
AB This invention relates to genetic constructs which comprise an
enhancer-promoter region which is responsive to radiation, and at least
one structural gene whose expression is controlled by the
enhancer-promoter. This invention also relates to methods of destroying,
altering, or inactivating cells in target tissue by delivering the
genetic constructs to the cells of the tissues and inducing expression
of the structural gene or genes in the construct by exposing the tissues
to ionizing radiation. This invention is useful for treating patients

with cancer, clotting disorders, myocardial infarction, and other diseases for which target tissues can be identified and for which gene expression of the construct within the target tissues can alleviate the disease or disorder.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 97:22761 USPATFULL
TITLE: Control of gene expression by ionizing radiation
INVENTOR(S): Weichselbaum, Ralph R., 2031 N. Sedgwick, Chicago, IL, United States 60616
Hallahan, Dennis E., 5343 N. Moody, Chicago, IL, United States 60630
Sukhatme, Vikas P., 1511 E. 56th St., Chicago, IL, United States 60637
Kufe, Donald W., 179 Grove St., Wellesley, MA, United States 02181

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5612318		19970318
APPLICATION INFO.:	US 1994-212308		19940314 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-35897, filed on 16 Mar 1993, now abandoned which is a continuation of Ser. No. US 1990-633626, filed on 20 Dec 1990, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Campell, Bruce R.		
LEGAL REPRESENTATIVE:	Arnold, White & Durkee		
NUMBER OF CLAIMS:	8		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	21 Drawing Figure(s); 16 Drawing Page(s)		
LINE COUNT:	1211		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 77 OF 84 USPATFULL

TI **Method** and device for diagnosing and distinguishing chest pain in early onset thereof

AB A diagnostic test, and a device for conducting the test, for assessing whether patient chest pain is cardiac in origin and for differentiating between unstable angina and myocardial infarction as a cause of patient chest pain is described. The diagnostic test comprises simultaneously detecting at least three selected cardiac markers with the use of at least three different monoclonal or polyclonal antibody pairs, each member of which is complementary to a different marker, which is released by heart muscle at varying stages after the onset of chest pain and is indicative of the cause of the chest pain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 97:14582 USPATFULL
TITLE: **Method** and device for diagnosing and distinguishing chest pain in early onset thereof
INVENTOR(S): Jackowski, George, Inglewood, Canada
PATENT ASSIGNEE(S): Spectral Diagnostics Inc., Toronto, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5604105		19970218
APPLICATION INFO.:	US 1995-420298		19950411 (8)
DISCLAIMER DATE:	20110503		
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-26453, filed on 3 Mar 1993, now abandoned which is a		

continuation-in-part of Ser. No. US 1991-695381, filed
on 3 May 1991, now patented, Pat. No. US 5290678,
issued on 1 Mar 1994

	NUMBER	DATE
PRIORITY INFORMATION:	CA 1990-2027434	19901012
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Knode, Marian C.	
ASSISTANT EXAMINER:	Wolski, Susan C.	
LEGAL REPRESENTATIVE:	Klauber & Jackson	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 10 Drawing Page(s)	
LINE COUNT:	2462	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 78 OF 84 USPATFULL

TI Chimeric immunogenic gag-V3 virus-like particles of the human immunodeficiency virus (HIV)

AB An unprocessed human immunodeficiency virus 2 (HIV-2) gag precursor protein, containing a deficient protease, assembles into virus-like particles by budding through the cytoplasmic domain of baculovirus-infected cells. Chimeric constructs were generated by coupling the truncated HIV-2 gag gene to the neutralizing domain (V3) or the neutralizing and CD4 binding domains (V3+CD4B) of gpl20 env gene sequences obtained from HIV-1 or HIV-2. Virus-like particles were formed by chimeric gene products when the env gene sequences were linked to the 3' terminus of the gag gene. The gag-env chimeric proteins displayed immunoreactivity towards anti-gpl20 rabbit antisera.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 96:111363 USPATFULL

TITLE: Chimeric immunogenic gag-V3 virus-like particles of the human immunodeficiency virus (HIV)

INVENTOR(S): Kang, Chil-Yong, London, Canada
Luo, Lizhong, London, Canada

PATENT ASSIGNEE(S): Korea Green Cross Corporation, Kyongki-Do, Korea,
Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5580773		19961203
APPLICATION INFO.:	US 1993-100118		19930730 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-992618, filed on 18 Dec 1992		

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1992-10493	19920617
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Budens, Robert D.	
ASSISTANT EXAMINER:	Parkin, Jeffrey S.	
LEGAL REPRESENTATIVE:	Merchant, Gould, Smith, Edell, Welter, & Schmidt	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	32 Drawing Figure(s); 18 Drawing Page(s)	
LINE COUNT:	848	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 79 OF 84 USPATFULL

TI Chimeric HIV-2 gag particles

AB The chimeric proteins, and a protential vaccine and diagnostic reagent comprising gag-env chimeric protein particles are disclosed. The preparation comprises linking gag of HIV-2 to env to form the chimeric gene, inserting the obtained chimeric gene into the DNA of a baculovirus, infecting insect cells or insect host with the resulting recombinant virus, culturing it and purifying the obtained chimeric protein. The gag chimeric protein of HIV according to the present invention retains both antigenic and immunogenic properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 95:75739 USPATFULL

TITLE: Chimeric HIV-2 gag particles

INVENTOR(S): Kang, Chil-Yong, London, Canada

Luo, Lizhong, London, Canada

PATENT ASSIGNEE(S): Korea Green Cross Corporation, Korea, Republic of
(non-U.S. corporation) a part interest

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5443828		19950822
APPLICATION INFO.:	US 1992-992618		19921218 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1992-10493	19920617
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Nucker, Christine M.	
ASSISTANT EXAMINER:	Tuscan, M.	
LEGAL REPRESENTATIVE:	Merchant, Gould, Smith, Edell, Welter & Schmidt	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	19 Drawing Figure(s); 11 Drawing Page(s)	
LINE COUNT:	621	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 80 OF 84 USPATFULL

TI Molecular clones of bovine immunodeficiency-like virus

AB Biologically active proviral molecular clones of bovine immunodeficiency-like virus and cell lines infected with the same have been prepared. Various utilities of the clones are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 95:3945 USPATFULL

TITLE: Molecular clones of bovine immunodeficiency-like virus

INVENTOR(S): Gonda, Matthew A., Walkersville, MD, United States

PATENT ASSIGNEE(S): The United States of America as represented by the
Secretary of the Department of Health and Human
Services, Washington, DC, United States (U.S.
government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5380830		19950110
APPLICATION INFO.:	US 1992-980324		19921124 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1989-408815, filed on 18 Sep 1989, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Stone, Jacqueline		

ASSISTANT EXAMINER: Railey, II, Johnny F.
LEGAL REPRESENTATIVE: Rucker, Susan S.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 2
NUMBER OF DRAWINGS: 40 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT: 1180
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 81 OF 84 DGENE (C) 2002 THOMSON DERWENT

TI Use of a nucleic acid binding polypeptide capable of binding to telomeric, G-quadruplex, or G-quartet nucleic acid as an enzymatic activity inhibitor or cytotoxic agent, for preparing a composition for treating diseases -

AN ABK10334 DNA DGENE

AB The invention describes a nucleic acid binding polypeptide (I) capable of binding to one or more of telomeric, G-quadruplex, or G-quartet nucleic acid as an inhibitor of enzymatic activity, for the preparation of a pharmaceutical composition for the treatment of a disease, or as a cytotoxic agent. (I) is useful for: inhibiting an enzymatic activity; preventing replication of a retrovirus e.g. for treating human immunodeficiency virus (HIV) infection or acquired immunodeficiency syndrome (AIDS); treating hyperproliferative disease, such as cancer; assaying a telomerase activity by providing a nucleic acid substrate for telomerase; determining the length of a telomere; discriminating between duplex and quadruplex nucleic acid; detecting telomeric structures in a system; and identifying a molecule capable of binding to a telomeric, G-quadruplex, or G-quartet structure in a nucleic acid. (I) is useful for the preparation of a pharmaceutical composition for the treatment of a disease, as a cytotoxic agent, and for killing a cell, preferably by inducing apoptosis. The assay for detecting telomerase activity using (I) is convenient, rapid, easily automated with liquid handling robotics and avoids the need to use radioactivity. This sequence represents an oligonucleotide used in the **production** of a **zinc finger** phage display library, described in the **method** of the invention.

ACCESSION NUMBER: ABK10334 DNA DGENE

TITLE: Use of a nucleic acid binding polypeptide capable of binding to telomeric, G-quadruplex, or G-quartet nucleic acid as an enzymatic activity inhibitor or cytotoxic agent, for preparing a composition for treating diseases -

INVENTOR: Choo Y; Isalan M; Liu X; Patel S; Balasubramanian S

PATENT ASSIGNEE: (SANG-N) SANGAMO BIOSCIENCES INC.
(UYCA-N) UNIV CAMBRIDGE TECH SERVICES LTD.

PATENT INFO: WO 2002004488 A2 20020117 147p

APPLICATION INFO: WO 2001-GB3130 20010712

PRIORITY INFO: US 2000-614679 20000712

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2002-216951 [27]

L5 ANSWER 82 OF 84 DGENE (C) 2002 THOMSON DERWENT

TI Use of a nucleic acid binding polypeptide capable of binding to telomeric, G-quadruplex, or G-quartet nucleic acid as an enzymatic activity inhibitor or cytotoxic agent, for preparing a composition for treating diseases -

AN ABK10333 DNA DGENE

AB The invention describes a nucleic acid binding polypeptide (I) capable of binding to one or more of telomeric, G-quadruplex, or G-quartet nucleic acid as an inhibitor of enzymatic activity, for the preparation of a pharmaceutical composition for the treatment of a disease, or as a cytotoxic agent. (I) is useful for: inhibiting an enzymatic activity; preventing replication of a retrovirus e.g. for treating human

immunodeficiency virus (HIV) infection or acquired immunodeficiency syndrome (AIDS); treating hyperproliferative disease, such as cancer; assaying a telomerase activity by providing a nucleic acid substrate for telomerase; determining the length of a telomere; discriminating between duplex and quadruplex nucleic acid; detecting telomeric structures in a system; and identifying a molecule capable of binding to a telomeric, G-quadruplex, or G-quartet structure in a nucleic acid. (I) is useful for the preparation of a pharmaceutical composition for the treatment of a disease, as a cytotoxic agent, and for killing a cell, preferably by inducing apoptosis. The assay for detecting telomerase activity using (I) is convenient, rapid, easily automated with liquid handling robotics and avoids the need to use radioactivity. This sequence represents an oligonucleotide used in the **production** of a **zinc finger** phage display library, described in the **method** of the invention.

ACCESSION NUMBER: ABK10333 DNA DGENE
 TITLE: Use of a nucleic acid binding polypeptide capable of binding to telomeric, G-quadruplex, or G-quartet nucleic acid as an enzymatic activity inhibitor or cytotoxic agent, for preparing a composition for treating diseases -
 INVENTOR: Choo Y; Isalan M; Liu X; Patel S; Balasubramanian S
 PATENT ASSIGNEE: (SANG-N) SANGAMO BIOSCIENCES INC.
 (UYCA-N) UNIV CAMBRIDGE TECH SERVICES LTD.
 PATENT INFO: WO 2002004488 A2 20020117 147p
 APPLICATION INFO: WO 2001-GB3130 20010712
 PRIORITY INFO: US 2000-614679 20000712
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 OTHER SOURCE: 2002-216951 [27]

L5 ANSWER 83 OF 84 DGENE (C) 2002 THOMSON DERWENT

TI Use of a nucleic acid binding polypeptide capable of binding to telomeric, G-quadruplex, or G-quartet nucleic acid as an enzymatic activity inhibitor or cytotoxic agent, for preparing a composition for treating diseases -

AN ABK10332 DNA DGENE

AB The invention describes a nucleic acid binding polypeptide (I) capable of binding to one or more of telomeric, G-quadruplex, or G-quartet nucleic acid as an inhibitor of enzymatic activity, for the preparation of a pharmaceutical composition for the treatment of a disease, or as a cytotoxic agent. (I) is useful for: inhibiting an enzymatic activity; preventing replication of a retrovirus e.g. for treating human immunodeficiency virus (HIV) infection or acquired immunodeficiency syndrome (AIDS); treating hyperproliferative disease, such as cancer; assaying a telomerase activity by providing a nucleic acid substrate for telomerase; determining the length of a telomere; discriminating between duplex and quadruplex nucleic acid; detecting telomeric structures in a system; and identifying a molecule capable of binding to a telomeric, G-quadruplex, or G-quartet structure in a nucleic acid. (I) is useful for the preparation of a pharmaceutical composition for the treatment of a disease, as a cytotoxic agent, and for killing a cell, preferably by inducing apoptosis. The assay for detecting telomerase activity using (I) is convenient, rapid, easily automated with liquid handling robotics and avoids the need to use radioactivity. This sequence represents an oligonucleotide used in the **production** of a **zinc finger** phage display library, described in the **method** of the invention.

ACCESSION NUMBER: ABK10332 DNA DGENE
 TITLE: Use of a nucleic acid binding polypeptide capable of binding to telomeric, G-quadruplex, or G-quartet nucleic acid as an enzymatic activity inhibitor or cytotoxic agent, for preparing a composition for treating diseases -

INVENTOR: Choo Y; Isalan M; Liu X; Patel S; Balasubramanian S
PATENT ASSIGNEE: (SANG-N)SANGAMO BIOSCIENCES INC.
(UYCA-N) UNIV CAMBRIDGE TECH SERVICES LTD.
PATENT INFO: WO 2002004488 A2 20020117 147p
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PRIORITY INFO: US 2000-614679 20000712
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2002-216951 [27]

L5 ANSWER 84 OF 84 WPIDS (C) 2002 THOMSON DERWENT

TI New library of nucleic acid binding **zinc finger** polypeptide(s) - each polypeptide comprising more than one **zinc finger** which is partially randomised, useful for detecting a target nucleic acid sequence.

AN 1999-024577 [02] WPIDS

CR 1999-024578 [02]; 1999-045309 [04]

AB WO 9853057 A UPAB: 20020215

A **zinc finger** polypeptide library (I) in which each polypeptide comprises more than one **zinc finger** which has been at least partially randomised is new.

Also claimed are: (1) a set (II) of **zinc finger** polypeptide libraries which encode overlapping **zinc finger** polypeptides which may be assembled after selection to form a multifinger **zinc finger** polypeptide; and (2) a **method** of preparing a library of nucleic acid (NA) binding proteins of the Cys2-His2 **zinc finger** class capable of binding to a target NA sequence.

USE - The **method** of (2) is useful for specifically engineering **zinc finger** proteins which can bind to particular nucleic acid targets. The resulting proteins can be used for determining the presence of a target nucleic acid (claimed). The proteins of the invention can be used in the manufacture of chimeric restriction enzymes, in which a NA cleaving domain is fused to a NA binding domain comprising a **zinc finger**. Fusion proteins comprising a binding protein and an integrase, e.g. viral integrase, can be used to target NA sequences in vivo. In gene therapy applications, the **method** may be targeted to the delivery of functional genes into defective genes, or the delivery of nonsense NA in order to disrupt undesired NA. Genes may also be delivered to known, repetitive stretches of nucleic acid, e.g. centromeres, together with an activating sequence such as an LCR. NA binding proteins can be specifically used to knock-out cells having mutant proteins, e.g. mutant ras. They can also be used to modulate the action of transcription factors, e.g. the activity of HIV tat may be reduced by binding proteins specific for HIV TAR. The new binding proteins may also be coupled to toxic molecules, e.g. nucleases, which are capable of selectively destroying cells which comprise a mutation in their endogenous nucleic acid. The products can be used in the treatment of infections.

ADVANTAGE - The invention provides a code of amino acid position bias which permits the selection of the library against any target nucleic acid sequence, and the **production** of a specific **nucleic acid binding protein**. Synergistic interactions between adjacent zinc fingers are taken into account, allowing the selection of any desired binding site. The invention allows the definition of every residue in a **zinc finger** nucleic acid binding motif which will bind specifically to a given nucleic acid quadruplet. When a marker protein is co-expressed with the binding protein, the requirement for gel electrophoresis is obviated, and so opens the way for automated nucleic acid diagnosis.

Dwg.0/6

ACCESSION NUMBER: 1999-024577 [02] WPIDS

CROSS REFERENCE: 1999-024578 [02]; 1999-045309 [04]
 DOC. NO. CPI: C1999-007688
 TITLE: New library of nucleic acid binding **zinc finger** polypeptide(s) - each polypeptide comprising more than one **zinc finger** which is partially randomised, useful for detecting a target nucleic acid sequence.
 DERWENT CLASS: B04 D16
 INVENTOR(S): CHOO, Y; ISALAN, M; KLUG, A
 PATENT ASSIGNEE(S): (MEDI-N) MEDICAL RES COUNCIL; (GEND-N) GENDAQ LTD
 COUNTRY COUNT: 83
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9853057	A1	19981126	(199902)*	EN	56
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9875422	A	19981211	(199917)		
EP 983349	A1	20000308	(200017)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
AU 737756	B	20010830	(200155)		
JP 2002502238	W	20020122	(200211)		56

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WO 9853057	A1	WO 1998-GB1510	19980526
AU 9875422	A	AU 1998-75422	19980526
EP 983349	A1	EP 1998-922963	19980526
		WO 1998-GB1510	19980526
AU 737756	B	AU 1998-75422	19980526
JP 2002502238	W	JP 1998-550153	19980526
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